RETHINKING REFORM
in HIGHER EDUCATION

From Islamization to Integration of Knowledge

ZIAUDDIN SARDAR & JEREMY HENZELL-THOMAS

RETHINKING REFORM IN HIGHER EDUCATION
FROM ISLAMIZATION TO INTEGRATION OF KNOWLEDGE

Rethinking Reform in Higher Education
From Islamization to Integration of Knowledge

ZIAUDDIN SARDAR & JEREMY HENZELL-THOMAS

CONTENTS

Foreword

MUSLIM SOCIETIES are experiencing a crisis of education at all levels. A plethora of recent studies has highlighted just how ruinous the situation has become. The 2003 Arab Human Development Report pointed out that the 'knowledge deficit' in Arab societies was 'grave' and 'deeply rooted'; a similar inference could be made about other Muslim nations. More recently, a number of research papers and other publications have reported similar findings.

Early in the 1980s, IIIT stated in its Work Plan that the 'centuries of decline have caused illiteracy, ignorance and superstition to spread among Muslims' and 'these evils have caused the average Muslim to withdraw into the bliss of blind faith, to lean toward literalism and dogmatism'. The Institute identified 'intellectual and methodological decline' as the core cause of this malaise, and we could go further in seeing it as a failure of both mind and heart.

Over the last few years, the IIIT has held a number of meetings to discuss the state of education in Muslim societies and to chart a viable way forward. Following this a Two-Day Symposium on Reform of Higher Education in Muslim Societies was held on 9th-10th December 2013 jointly with the Wilson Center.

Further intensive deliberations took place at IIIT meetings in the UK and led to a number of conclusions. It was noted that the social sciences in general have come under severe criticism for fragmenting reality as though the political, social, economic and psychological human being were a different species to be studied in compartmentalized fashion. It was also realized that the crisis of education, including Higher Education, is not limited to Muslim societies. Higher Education in the West is also facing a predicament – although the crisis here is of a different nature. The former Dean of Harvard

College, Harry R. Lewis, has dealt with this in his book *Excellence Without a Soul: Does Liberal Education Have a Future?* Many other concerns have been raised in books and papers.

Another conclusion was that the overall problems of Higher Education are epistemological and ethical in nature. The way forward requires us to meet those challenges through the integration of knowledge – which necessitates rethinking disciplinary identities and a new mode of thought that would integrate Revealed knowledge with human efforts in knowledge production. In other words, we need a new paradigm rooted in the Qur'anic worldview and an epistemology based on the doctrine of *tawhid* (the Oneness of God) and on responsibility to God, one's own soul, humankind, all created beings, and the natural world. This paradigm accords importance to Revealed and human knowledge, and recognizes the diversity and plurality of our societies, as well as the accelerating pace of new technologies and innovations that are transforming the world.

Following the intensive UK meetings Professor Abdelwahab El-Affendi was requested to write a concept paper on Education Reform. The paper he produced was commented on by Dr. Jeremy Henzell-Thomas. Both papers were then synthesized and developed in a paper entitled "From Islamization to Integration of Knowledge: Rethinking Reform in Higher Education" by Professor Ziauddin Sardar. The resulting paper was circulated for discussion at the conference on Reform of Education in Muslim Societies organized in Turkey by IIIT jointly with the Faculty of Theology, Istanbul University, and MAHYA, on 18th-19th March 2016. The discussion paper is included in this publication, in addition to three other papers. This volume represents the first publication of the IIIT Reform of Higher Education in Muslim Societies Project (RHEMS), and is being jointly published with The Center for Postnormal Policy and Futures Studies.

The Reform of Education in Muslim Societies conference held in Istanbul was structured around four major themes:

- The Nature and Characteristics of Islamic Legacy and Ethics of Islam in Education
- Issues in Integration of Knowledge and Legacy of IIIT
- Issues and Currents in the Dominant Paradigms of Education
- The Future of Education in a Globalized World

This reform project is in sum a paradigm shift in perspective driven by important considerations including the aims of education itself. It may require reforming existing disciplines, inventing new ones, as well as working in conjunction with current knowledge(s) and discourses by taking effective account of the ethical, spiritual norms of Muslim society, the guiding principles that it operates under, which in turn mark the underlying basis of its makeup and spiritual identity. Rather than creating divisions, reform of Higher Education recognizes the plurality and diversity of the modern networked world, and seeks to replace sterile and uniform approaches to knowledge with a broader and more creative understanding of reality as lived on different soils and different cultures. Moderation, balance and effective communication are paramount features of the underlying philosophy.

We hope the ideas and thoughts offered in this volume will act as a catalyst to stimulate further debate and discussion on the issues explored. The aim is to generate refreshing, workable and practical proposals in all areas of Higher Education that could enrich and support the Reform of Higher Education in Muslim Societies Project. We invite researchers and experts to join this brainstorming exercise by submitting their ideas, critique and original contributions.

ZIAUDDIN SARDAR

Mapping the Terrain

THE ASSERTION that higher education needs to change, and change radically, has a long history. It is usually associated with 'the crisis in higher education' argument that was popularized by the much quoted *Excellence Without a Soul* by Harry Lewis, the former Dean of Harvard College, published in 2006. Lewis argued that universities like Harvard no longer teach the basic virtues of being human, the ideals of liberal education devoted to freeing the mind and the spirit. But the analysis of this 'crisis' goes much further than Lewis; and the cause of the malaise is not just the absence of a soul.

The term 'crisis' has multiple meanings. The dictionary definition is 'time of moment and danger'. In Late Middle English, it referred to the turning point of a disease, when the patient's own capability for healing was not sufficient for recovery. The Greek meaning of the word, also implies the moment of truth: when significance of event reaches a point when it became absolutely necessary to make a decision (O'Conner, 1987). In the classical sense, education is at a turning point; it has reached a point where it is not capable of healing itself with its current conceptual, intellectual, moral and organizational capabilities. A moment of truth has arrived: it is a time for decision and transformation. But a crisis does not emerge in isolation;

and the crisis of education is not an exceptional phenomenon. It is a product of and connected to a host of other crises: the crisis of capitalism (Wolff, 2016), *Crisis Economics* (Roubini, 2011), the crisis of social democracy (Keating, 2015), *Crisis of Moral Authority* (Cupitt, 2012), not to mention the environmental crisis, spiritual crisis and the crisis of faith. We seem to be living in 'a post-crisis world' (Sharma, 2016). So to fully appreciate the dimension of the crisis in higher education, we need to see it as one particular node in a web of multiple, interconnected, crises. All of which suggests that conventional ideas we have been relying on are broken.

Way back in 1997, Bill Readings argued in *The University in Ruin* that the historical links between universities and nation states have been broken. Higher education is in crisis because the nation state itself is in decline, promoting and protecting national culture is no longer important for many, and the economy of globalization means that the university is no longer called upon to train citizen subjects. As a result, universities are turning into corporations, and the idea of culture is being replaced with a discourse of excellence. Reading argued that higher education should be answerable to issues of justice rather than the criteria of truth; and our goal should be to do justice to education. A year later, in an influential article, Michel Godet, Professor of Prospective and Strategic Management at the prestigious Conservatoire National des Art et Meteirs (CNAM), also suggested that education systems, despite vast differences between those in developed and developing countries, were 'undergoing crisis'. 'If education is universally called into question', he stated, 'it is not because less is required of it, but rather because something more, and perhaps different is demanded' (Godet, 1988, p.243). Godet identified eleven 'major crisis factors' which are worth quoting in full:

1. *The epistemological crisis*, (education, training, apprentice-ship...), the inadequacy and the difficulty of drawing international abundance of information, comparisons, and the outbreak of widely held ideas based on received wisdom about education (deteriorating standards, the role of teaching methods, etc).

2. *Crisis of aims.* What are the objectives of the education system? To develop the individual, to create responsible citizens, to pass on certain skills, to teach students how to learn? Should it select and shape an elite, or is collective progress preferable to selective promotion?

3. *Crisis regarding the content and organization of education systems.* This crisis follows logically from the second crisis. What should be taught, to whom, and how? Here the question emerges of formative v normative assessment. The former would have the advantage of providing a means of identifying each pupil's strong and weak points, and would be a better way of encouraging pupils to improve their own performances. This formative assessment would facilitate the streaming of pupils and evaluation of the effectiveness of the teaching. Normative assessment would remain useful for external aims – it would give teachers and pupils a means of ranking individuals. In this way, assessment would no longer involve a fear of failure, but would impart a desire for progress.

4. *Crisis of the selection process.* All too often, the price to pay for the success of a minority is a feeling of failure and frustration amongst a significant part of the rest.

5. *Crisis of egalitarianism and meritocracy.* The egalitarian, meritocratic illusion is increasingly belied by the facts. The iron rule of education systems is that academic success remains closely linked to social origins, whatever system is in operation. Disillusionment is all the stronger as more and more diplomas are needed to find a job...

6. *Crisis of control.* Because of its very gigantism, the education system is characterized by strong inertia and resistance to change. To bring about change is a long and difficult task. Every action sparks off complex and often perverse chain reactions, which take time to be identified and to recognize. Head teachers' authority and training are insufficient for the management responsibilities entrusted to them, whilst at the same time teachers have almost total pedagogic autonomy.

7. *Crisis in the quality of education and, perhaps, of teachers.* The massive recruitment of the 1960s and 1970s involved a certain laxity in job qualification requirements. Some teachers were asked to impart knowledge which they themselves did not have. It was as if teacher training, which is also indispensable, could replace knowledge. Naturally, the lack of real opportunity to assess or sanction a teacher's action in the classroom, whether negatively or positively, is not conducive to improvement in quality.

8. *Crisis in economic and social effectiveness.* Diplomas are increasingly necessary because they are increasingly devalued. The race for the diploma means a waste of resources.

9. *Financial crisis.* In a number of countries it has become impossible to increase public expenditure on education. Furthermore, it has become evident that we cannot solve all the problems of education by financial means.

10. *Crisis of confidence.* The public expects far too much of its schools, and this is no doubt why it is increasingly challenging them and denouncing teachers' lack of motivation and their weak points. Also, because the academic machine is distributing ever greater numbers of diplomas, the value attributed to each one is diminishing. Growing numbers of pupils, on reaching the end of the course, feel that they have been swindled. In an education system which is selective rather than formative, increasing the number of 'products' diminishes the value of each one.

11. *Teachers' identity crises.* Teachers have seen their social status downgraded, their abilities questioned and their skills devalued in comparison with other media. (Godet, 1988, pp.248-249).

Two further drivers of change and crisis were identified by Peter Manicas: globalization and technological developments, which tend to go hand in hand. 'Globalisation', Manicas suggested,

has undercut the idea that states can underwrite development by fostering the sciences in universities. This is a consequence of a number of factors: there is world-wide accessibility of scientific information, itself due to new communication technologies, both innovation and the training of qualified technical worker is now globalised, the newer technologies do not generally require massive infrastructure and investment, and most critically, corporations are global: their achievements do not necessary rebound on the nation where their headquarters are located (Manicas, 1998).

In the Middle East, the problem is made worse because universities are controlled by the state and thus do not contribute to 'the rise of civil society' or 'the civilising of the state' (Mojab, 1998, p.657).

The underlying argument of most of the early literature on the crisis of education is that, thanks to confluence of the rise of neoliberalism, increasing globalization and advancing communication technologies, universities have become big businesses. This trend has not only become stronger over the decades but is now heading towards a bizarre direction. Tom Abeles suggests that leading universities of the world now behave as multinational corporations with global partners, joint ventures, and liaisons with the corporate and investment banking communities. They have been 'deconstructed' and now package their programmes and modules to cater for a celebrity obsessed public. Soon, Abeles submits, 'students will be able to choose an astronomy course taught by Leonard Nimoy as "Mr Spock" or an archaeology course delivered by Harrison Ford as "Indiana Jones"'. When it comes to research, many universities 'are like Shakespeare's Polonius, being led by industry, playing *Hamlet*, dangling contracts like shape shifting clouds' (Abeles, 2001).

The beginning of the twenty-first century changed both the social, cultural and political structure of an increasingly globalized world and the nature of higher education. In response to globalization, notes H. Eggins, higher education has 'moved from a peripheral to a central position' (Eggins, 2003, p.3). The traditional role of universities of acquiring, transmitting and preserving knowledge was eroded and

replaced with the role of service providers catering for their clients and consumers. They now cater largely to technologically savvy students 'who come from homes that are increasingly connected to the world through the ethernet and internet. They have devices that provide them with information and learning opportunities in ways not available just a few years ago – iMacs, iPhones, iPads, iPods, and other options with different operating systems. They are technological natives – born into the culture' (Gilbert, 2013). By necessity, universities have adopted to the internet generation. But as Abeles notes, this has produced diminishing returns: 'in a wired world, the cost per bit of information is getting cheaper, yet the cost per useful bit is become dearer'. An illiterate person with computer and coding skills is still illiterate. Students remain semi-literate even when they have acquired highly specialized technological skills and higher degrees. In a radically changing landscape, universities sought to be 'modern' when 'many of the deep structures, arrangements and concepts of reality that framed modernity, provided it with its root metaphors and worldview, along with our sense of certainty' was rapidly withering away (M. O'Hara, 2007). Change is not just rapid but also rapidly increasing; what Robert Colvile calls *The Great Acceleration* (2016). In the face of such rapid change, the products of universities find themselves as 'strangers in a strange land'. Institutions of higher education have failed to realize the radical nature of the current historical change. They assumed, much like most people and institutions, that the future 'will be just a better or worse version of the industrial society we have today'; and that 'the framing logic of secular western rationalism' will, as it has done for a couple of centuries, serve them well and usher them towards the much vented 'knowledge society'. However, O'Hara suggests, it is much more 'reasonable to think that what is considered to be the basic knowledge canon, in terms of desirable modes of reasoning, sense of identity and even of "reality", may be fast becoming obsolete and inadequate to deal with the everyday challenges of life in the globally interconnected society' (M. O'Hara, 2007, p.993).

The 'basic knowledge canon', what should be taught and how it

should be taught, not only 'remains mired in the distant past' (Jacobs, 2015) but it also has other serious shortcomings. It emphasises the priorities and desires of the present generation at the expense of the needs and requirements of future generations (Masini, 2013). It places emphasis on 'soulless standardization'; and does not prepare the students for a world dominated by uncertainty and insecurity (Hargreaves, 2003). It is inflexibly focussed on 'inflexible degree requirements, semester and course timelines that force learning to be time rather than learning based, and assessments that focus on comparing students rather than truly contributing to mastery of learning objectives' (Watson and Watson, 2013). Despite the fact that universities eagerly embraced digital technology, they failed to realize the importance of networks: 'even though social networks have become part of our daily lives, and some higher education institutions utilize networks', there is little awareness or research 'in higher education on the way networks create change or can be used towards change' (Kezar, 2014).

All of this leads to one, undeniable, conclusion: institutions of higher education are out of sync with the contemporary world and are now way past their 'sell by' dates. There is an urgent 'need to change the educational paradigm' because 'the entire world faces unprecedented challenges: economic, technological, social and personal', and higher education is just not capable of meeting these challenges (Tomozii and Topala, 2014). There is also an equally crucial need to develop human capital, promote creativity, adaptability, and imagination; for education to promote 'appreciation of culture, and inculcate altruism', focus on values, ethics and the moral dimension of knowledge, and 'take a large, long term view' (Zinser, 2012). We need to rethink the aims, purpose and the future direction of universities.

RETHINKING UNIVERSITIES (OR NOT)

The crisis has not stopped the field of higher education growing and expanding, even though it has gone through tremendous change. Over the last two decades, there has been a proliferation of journals devoted

to various aspects of higher education (Bray and Major, 2011). This growth has been attributed to internationalization and globalization as two distinct trends with different consequences (Enders and Fulton, 2002). Internationalization has led to the growth of international cooperation, including student and staff mobility, cooperative research, and the diversification of curriculum. It has also introduced some paradoxes and contradictions in the social role of universities, leading to isolation at community and regional levels. Globalization, a more complex and 'ideologically more suspect' process, imposes a neoliberal market framework and undermines the authority of the state over higher education. These trends led to cuts in government funding (Oliff et al., 2013), student numbers and fees have increased, curriculum changes have been forced and tenured faculty has been forced out (Flaherty, 2014), while there is constant pressure to introduce more and more online and distant learning courses. Governments in OECD countries are demanding that universities support business and local enterprises and even move out of research and teaching to better serve local economies (Sharma, 2012). In the UK, universities are seen as an integral part of the supply chain to business (Wilson, 2012). An Ernst & Young (2012) report on Australian universities suggested that the traditional research and teaching model may not survive for long and recommended that they compete for mobile international students who have access to huge amount of information and build close ties with industry. Although many are acutely aware of this environment of rapid change and contradictory demands, there have been few forward-looking and research-driven investigations on how we should rethink the nature, function, and purpose of universities (Dator et al., 2013; Vincent-Lancrin, 2004). As Deresiewicz notes, 'college is seldom about thinking or learning anymore. Everyone is running around trying to figure out what it is about. So far, they have come up with buzzwords, mainly those three' – 'leadership', 'service' and 'creativity' (Deresiewicz, 2015).

This confusion is well illustrated by the massive European Union project 'European Higher Education at the Crossroads'. The project was based on a number of conferences – in some, I participated – that

aimed to go beyond the 'Bologna process and national reforms' and chart a way forward for European Universities. The Bologna process began with the signing of the Bologna Declaration in that city in 1999. The idea was to bring European universities together and create a common European Higher Education Area (EHEA), provide a space where common parameters can be discussed, negotiated, implemented and coordinated, and transform Europe into a competitive, dynamic knowledge base economy. On the whole, the Bologna Process has been declared as a huge success – despite the wide acknowledgement that higher education in Europe is in a state of crisis. Most of the solutions offered for moving forward, at the end of the project, are standard and derivative: internationalization of universities, better governance through substantive autonomy, more funding, quality assurance, differentiation between universities in Europe, and promoting mobility amongst students and staff. However, a couple of policy recommendations are somewhat original. First: a transformation from course structures to academic cultures, with emphasis on both skills and employability 'as a response to the challenges facing Europe within the global knowledge economy', and social inequality in Europe. Second: an emphasis on foresight (also known as futures studies) as a consequence of the changing dynamic between Europe and the world, recognition of the economic interdependence and decisive political action, and cultural perils of Eurocentrism (Curaj et al., 2012). However, despite an awareness of the changing landscape and concerns for social justice, universities are still reframed within the dominant (failing) economic paradigm. The overall emphasis is on neoliberal economy and *Mergers and Alliances in Higher Education* (Curaj et al., 2015).

The overall emphasis of the European Union project is not too far removed from what the World Bank and the IMF, both major investors in higher education in Muslim and developing countries, have been advocating for quite a few decades. The World Bank's first policy paper devoted to tertiary education, *Higher Education: Lessons of Experience*, recognized the crisis in higher education and then went on to recommend a strategy based on:

- Encouraging greater differentiation of institutions, including development of private institutions;
- Providing incentives for public institutions to diversify sources of funding, including cost-sharing with students, and linking government funding closely to performance;
- Redefining the role of government in higher education; and
- Introducing policies explicitly designed to give priority to quality and equity objectives. (World Bank, 1994, p.4)

The report argued that these higher education policies will lead to poverty reduction, increased equality, stability, growth and all-round development. In the follow-up 2002 report, *Constructing Knowledge Societies: New Challenges to Tertiary Education*, the World Bank was forced to acknowledge that higher education was independent of socio-economic structures, and had little or no real impact on poverty, growth or indeed anything else. Now, it advocates a long term and comprehensive, interconnected strategy that recognizes the complexity of the emerging changes. Free markets in higher education must be balanced with quality assurance, it suggests. Emerging economies should encourage partnerships with regional institutions, and buy franchises with foreign universities and recognized international providers (World Bank, 2002). Thus, the accent has remained on monetarist economic model that underpins the philosophy and work of the World Bank and IMF. Recently, however, the IMF has acknowledged that the neoliberal agenda of the past thirty years has turned universities into supermarkets catering, as Abeles (2001) points out, to venture capitalists who are interested in 'liberal studies majors, because the arcane art of his practice could be mastered in 30 days on the job' and the core of traditional education is 'being pushed progressively over the edge and off the table, like coins in a penny arcade game'. While still cheering neoliberal free markets, the IMF's top economists writing in its flagship journal, *Finance and Development*, conclude that the costs of neoliberal agenda 'in terms of increase inequality are prominent', 'the benefit in terms of increased growth seem fairly difficult to establish', and the cost of constantly 'curbing

the size of the state' and pushing privatization 'could be large – much larger than benefits' (Ostry et al., 2016).

The dominance of intuitions such as the World Bank means that higher education reform is often imposed from above rather than organically emerge from below. The global educational reform discourse, as Rizvi and Lingard notes, 'are no longer located within the national space', but 'increasingly emanate from international and supranational organisations'. Not surprisingly, the very idea of transforming education has become 'integral to sustaining the neoliberal themes of free markets, economic competition, and other requirements of the global economy by organisations such as OECD, European Union and the World Bank' (Rizvi and Lingard, 2010, p.14). But this discourse of 'hegemonic regimes' (Bates, 2016, p.3) has also been embraced by national institutions and academics. A good example is provided by researchers brought together from US, Europe, Australia and Africa by Heather Eggins in *Globalization and Reform in Higher Education*. The contributors to the volume suggest that the challenges of globalization are best met with reform of funding, internationalization, standardization, and manager-academics (Eggins, 2003). Confusion and contradictions abound; and hardly anyone has any idea how we could/should rethink universities. Crow and Dabars describe this as the 'gulf of mutual incomprehension' (with a nod to C. P. Snow).

It is hardly surprising that criticism of the corporate structure of the universities is increasing. Indeed, there is a growing movement to reclaim their independence and liberate them from the suffocating corporate embrace. An 'Alternative White Paper' published in Britain, entitled 'In Defense of Public Higher Education', calls for universities to be 'morally and intellectually independent of all political authority and intellectually independent of all political authority and economic power'. It states: 'public higher education is not state-controlled higher education, but publicly-funded higher education that respects these principles and secures other public benefits appropriate to a democratic society. These principles and benefits are put at risk by a market in higher education and the entry of for-profit providers'. Moreover,

it argues that 'teaching and research in universities must be inseparable if their tuition is not to lag behind changing needs, the demands of society, and advances in scientific knowledge' (Alternative White Paper, 2011). A manifesto, issued by the staff and students of the University of Aberdeen, aims to 'turn the university back as a place for education, trust, community and academic freedom' (Ingold, 2016). Another platform – simply labelled Manifesto 15 and signed by a string of American academics – seeks to galvanize popular support for reforming education. 'In a world consumed with uncertainty and a growing sense of the obsolescence of our education systems', it asks, 'how can we ensure the success of ourselves as individuals, our communities, and the planet?' The answer is to 'evolve education'; starting from 'what we have learned so far' (Moravec, 2015). Others point to newly established universities, such as the University of Mondragon in northern Spain, as a model to be emulated. Established in 1997, it functions as a non-profit cooperative; staff, administrators and students all have a stake in the university and can claim ownership (Matthews, 2013). Berea College in Kentucky, USA, is also seen as a potential model for the future. With $1.1 billion endowment, it is one of the wealthiest higher education institutions in the country; but the Christian collage does have a number of unique and unusual features. 'Unlike most well-endowed colleges, Berea has no football team, coed dorms, hot tubs or climbing walls. Instead, it has a no-frills budget, with food from the college farm, handmade furniture from the college crafts workshops, and 10-hour-a-week campus jobs for every student' (Lewin, 2008). It operates on a no-tuition model to provide higher education for students who have 'great promise but limited economic resources' (Berea website). The emphasis is on creating a learning community, with students as equal partners, and equality between minority groups and men and women.

Besides projecting innovative institutions as future models, and manifesto calls for change, attempts are being made to change universities from within. In *Designing the New American University*, Crow and Dabars suggest that the university has to be redesigned from the ground up on the principles of interdisciplinarity. What makes

universities unsuitable for our rapidly changing world, they suggest, is 'the persistence of the traditional correlation between academic disciplines and departments' (Crow and Dabars, 2015, p.185). All art and science faculties in American universities, and we can assume elsewhere in the world, contain the similar list of departments. Each discipline is a distinct culture that seldom interacts with another disciplinary culture. The disciplinary structures that currently inhabit the universities, Chad Wellmon (2015) tells us in *Organizing Enlightenment: Information Overload and the Invention of the Modern Research University*, first emerged during the late 18th century. Then, as now, society was troubled by advancing technologies such as the wide availability of printed material – 'the flood of print', the 'plague' of books circulating 'contagiously' amongst the educated public. There was concern about what constituted authoritative knowledge, specialization and reliable information. The disciplinary structures that universities shaped and created, Wellmon argues, constitute the most profound and lasting contribution of the Enlightenment. The goal was not just to institutionalize a new order of knowledge and disciplines but also shape a particular type of disciplinary person (Wellmon, 2015). Universities have used this self-organising form as a survival mechanism. But the old disciplinary structure has now become static; and the mechanism itself now threatens the very survival of universities.

One potential path out of the impasse is to move towards interdisciplinarity, which often receives hostile reactions from academic quarters. But as Crow and Dabars point out, 'both science and society now recognize that disciplinarity and interdisciplinarity are not mutually exclusive but complementary' (Crow and Dabars, 2015, pp.184-185). Redesigning the university requires interdisciplinarity to be both the core elements of the structure, as well as the basic philosophy, of the university. For Crow and Dabars, the ideal American redesigned, interdisciplinary, higher institution for research and learning is Arizona State University (ASU), where Michael Crow has served as President since 2002.

Facing steep budget cuts following the 2008 financial crisis, ASU

initiated an aggressive plan to reimagine itself. It involved 'interdisciplinary reconfiguration' of the university and establishing a number of innovative multidisciplinary centres of excellence. A record number of joint-appointments, such as Art History and Computer Science and in emerging fields such as social dynamics and complexity were made – together with an emphasis on sustainability. Amongst the innovative centres and institutes established at ASU are the Institute of Biodesign and Institute of Human Origins. ASU's Julie Ann Wrigley Global School of Sustainability offers both undergraduate and graduate degrees and boasts over 100 faculty members – all share appointments in other departments and come from a range of disciplines. In 2015, ASU launched the School for the Future of Innovation in Society, which sees its 'efforts as part of a larger social fabric – local, regional, national, global – that informs our wants and needs about the futures we will want to inhabit' (Guston, 2015). All of this led *U.S. News and World Report* to pronounce ASU as the 'most innovative school' in the United States for 2016 (ASU News, 2015). Critics of ASU, and President Michael Crow, however, deride the university's entrepreneur-driven approach to higher education, and its deep connections to American corporate interests. A great deal of funding for the new centres and chairs has come from the Department of Defence, the Army Research Laboratory, NSA as well as well known American corporations. But there is little doubt that the experiment has produced positive results, all of which are dutifully outlined by Crow and Dabars – including, the number one ranking in the US in innovation, increases in enrolment and financial aid, socioeconomic diversity and affordability, freshman persistence, improvements in academic achievements, the expansion of research enterprise as well as honors in terms of Noble and Pulitzer Prizes. This has been achieved, argue Crow and Dabars, because ASU embraces its cultural, socio-economic and physical setting; catalyses social change by being connected to social needs; uses its knowledge and encourages innovation; creates knowledge by transcending disciplines; connects with communities through mutually beneficial partnerships; engages with people locally, regionally, and internationally; commits to the success of

each unique student; and hence its research has purpose and impact. Given its success, announce Crow and Dabars, ASU offers one of the best models for how to rethink universities, transform higher education, and usher in a new forward-looking paradigm. Indeed, it should be seen as the 'foundational prototype for a New American University'.

A somewhat deeper analysis is offered by the late Pall Skúlason, educational philosopher and former Rector of the University of Iceland. The main problem for the confusion surrounding higher education and its reform, Skúlason argues, is that we do not know what a university is for. The modern European universities developed in the 19th century in three different countries, with three different traditions, each with a different notion of what a university is for. The German tradition was developed by the philosopher Wilhelm von Humboldt who established the Humboldt University of Berlin in 1807. The Humboldtian model sees the university's purpose as the advancement of science and scholarship, and focusses on basic research; and the academics themselves govern the universities in collegial fashion. The French tradition can be traced back to Naploeon, who founded l'Université de France in 1806. In this Napoleonic model, the purpose of the university is to provide knowledge and expertise needed by the nation. The main aim of the university is the training of the professionals who manage and run society and government. The governing structure is hierarchical as the state funds and regulates the university. The British tradition is based on the ideal expressed by by Cardinal John Newman in *The Idea of a University* (1852). In this Newmanian model, the university's purpose is to provide expertise and trained professionals to run both the nation and the Empire. The emphasis in on the development of character and competence of individual student and the governing structure is professional management of the university. These traditions, writes Skúlason, 'have merged, creating tensions within European universities, and indeed all over the world where universities operate to a greater or lesser extent on European model' (Skúlason, 2015, pp.27-28). (Crow and Dabars also discuss these traditions in relation to the United States). The situation

is aggravated by yet another, relative new American model: universities as business enterprises. In Europe, the Bologna process left these contradictory traditions untouched; and concentrated on organizational and structural issues 'to provide Europe with a coherent and efficient university system that stimulates mobility and employability, making the European countries more competitive in the global economic market. This goal has been reached, or is being reached, through a common degree structure, standardized recognition procedures, qualification frameworks and systems of quality assurance'. But 'a shared vision and direction concerning the basic aims of the universities' has failed to emerge (Skúlason, 2015, pp.54-55). Accelerating technological change and growing global interconnections and complexity has transformed this lack of vision into an acute identity crisis.

Skúlason proposes, with a nod to the English philosopher Michael Oakshott, that we see and understand a university as 'a conversation, a place where people who are trying to understand the world and their own existence within the context of a common pursuit for knowledge and learning come together to converse and exchange ideas'. As a community actively engaged in conversation, a university need not be located in a particular place but can easily be globalized – not least with the help of modern communication technologies. The conversation can thus be international and cross-cultural, cooperation and collaboration can flourish, 'giving academics the opportunity to share their ideas and beliefs and learn from different academic traditions' with 'the ambition to serve not only their local communities but humanity at large…they can help the nations of the world deal with the many theoretical, technical, and ethical problems confronting them' (Skúlason, 2015, p.38).

The conversation itself has to be based on ethics of knowledge and belief. Skúlason has a very particular take on belief; one that I consider to be rather close to the Islamic view propagated by the Mutazalites. He considers the idea, attributed to Descartes, Kant and Sartre, that we should not believe unless we have investigated and conformed the validity of our beliefs to be 'completely unrealistic'. This implies,

the elimination of all belief, because agreement is an act of will, and thus the result of a decision. In other words, it is simply an illusion that we might deliberately eliminate or suspect all our beliefs. This means that increasing the likelihood that our beliefs are true cannot be achieved by inventing methods or rule for accepting them on the basis of reasons that we consider valid. Rather, what matters is that we have acquired epistemological virtues that ensure as well as possible the validity of our beliefs' (Skúlason, 2015, p.91).

The epistemological virtues Skúlason seeks include: intellectual impartiality, intellectual sobriety, intellectual course, intellectual relevance, and reflective equilibrium defined as 'knowing how to modify a rule when it would lead to the rejection of a clear intuition, and knowing when to reject an intuition when it would contradict a fundamental rule' (Skúlason, 2015, p.92). The ethics framing both the conversation and epistemological virtues are the search for new knowledge, the synthesizing of knowledge, the communication of knowledge and the preservation of knowledge.

Conversations proceeds, and the university seeks its mission, within this ethical and belief framework. *The* mission of a university, Skúlason contends, are promotion of ideas and cultures. The ideas 'that belong to culture are not merely the ideas we *have*, whether individually or in common; they are *constitutive* of ourselves' (Skúlason, 2015, p.99). We *are* our ideas. We flourish when our ideas flourish and so does our culture. But 'culture, left to itself, has a tendency to degenerate if it is not constantly cultivated and reinforced by people dedicated to its care'. The ethical mission of the university is thus to reflect continuously and systematically on our ideas and work for their advancement in a rapidly changing world. The task, Skúlason suggests, is twofold: 'on the one hand we have to be open to new formulation or interpretation of the ideas that are basic to our thought and action, and this requires that we continuously reflect on these ideas from different perspectives and vantage points, suggesting that we have to resist both an overly skeptical attitude, where we doubt all conclusions and theories, as well as an overly dogmatic attitude, where we allow

ourselves to be convinced once and for all about what we take to be true or right. On the other hand, we have to be aware of the fact that the basic values, which we have the duty to preserve and nourish, are always at risk of being overthrown by different set of values related to interests and types of activity other than those that are proper to the academy' (Skúlason, 2015, p.103).

KNOWLEDGE SOCIETIES AND KNOWLEDGE PRODUCTION

Skúlason's profound concerns about ethics and beliefs suggest that orthodox modes of knowledge production are not just inadequate but largely irrelevant, particularly for non-western cultures – although, Skúlason himself does not draw this conclusion. But the inadequacy of conventional ways of knowing, and the university as a repository of knowledge, is increasingly being questioned by Generation Z, the tech savvy cohort growing up with digital technologies (White, 2016). If, asks Wellmon, 'the university's monopoly on knowledge has already ended, as critics suggest, then what distinguishes it from other sources of knowledge in the age of Google and *Wikipedia*? What is the purpose of the university in an age in which academic expertise has been eroded by the democratization of the tools for distributing knowledge?' (Wellmon, 2015, p.19). It is not just that the processes of dissemination and transmission of knowledge have changed but also the very nature of knowledge itself: what actually constitutes knowledge and how we acquire it.

Conventionally, knowledge is produced by disciplines; that is why universities are organized according to structures of disciplinary sciences. But as I have written elsewhere, disciplines are like burgers and coke: just because they are eaten and drank everywhere does not mean they are universal and were made in heaven. Disciplines 'do not exist out there in some "reality" but are socially constructed and develop and grow with specific world views and cultural milieux' (Sardar, 1997, p.38) – just as modern universities have emerged within particular cultures and traditions, as both Wellmon and Skúlason illustrate so well. The conventional knowledge production around disciplines

has been changing for some time now and is being replaced by the emergence of a distributed knowledge production that tends to be interdisciplinary, diffused, complex, and often has high levels of uncertainty. In philosophy and the sociology of science, it has been given different labels such as 'post normal science' and 'Mode 2 knowledge'. Postnormal science theory sees conventional knowledge production as inadequate for a world where 'facts are uncertain, values in dispute, stakes high and decisions urgent' (Funtowicz and Ravetz, 1991). New knowledge must be produced in a framework of an 'extended peer community', which includes not just academics and experts but also critics, activists, lay person and all those who are affected by emerging knowledge. Different parties bring their own 'extended facts' – that may include local knowledge, indigenous knowledge, leaked documents, and other material not on the radar of the experts; the end product is thus a result of contestation and dialogue that leads to a 'democratization of expertise'.

In his report on *Higher Education Relevance in the 21st Century* to the Association of Commonwealth Universities, Michael Gibbons, who came up with the term, identified five attributes of Mode 2 knowledge production: it is knowledge produced in the context of application; it is transdisciplinary; it is heterogeneous and represents organizational diversity; it is based on enhanced social accountability; and it has a more broadly based system of quality control (Gibbons, 1998). What this means is that research and teaching cease to be self contained activities but involve interaction with a variety of other knowledge producers; and research in universities often involves collaboration with research in industry, corporations, and other knowledge creators. Given that around 90% of knowledge produced globally is not produced where it is actually required, the challenge for universities – indeed, all knowledge producers – is 'how to get knowledge that may have been produced anywhere in the world to the place where it can be used effectively in a particular problem-solving context' (Gibbons, 1998, p.8). In *Re-Thinking Science: Knowledge and the Public in the Age of Uncertainty*, Gibbons and his colleagues argue that for survival and success, universities have to 're-engineer'

themselves; and 're-engineering may need to be accompanied by re-enchantment and the extension of the university's socio-economic, cultural and scientific roles by opening up of its life-world'. The university will also have to de-institutionalize as in contemporary complex, uncertain and interconnected times 'inside' and 'outside' make no better sense than teaching and research (Nowotny et al., 2002, p.91).

The concept of Mode 2 it is not new. It actually takes us back to the early nineteenth century before knowledge production was institutionalized in universities. It has also been severely criticized: multi-disciplinary and transdisciplinary research can be undertaken without recourse to context or diversity and without broadly based quality control. But it does provide us with insights into emerging modes of knowledge production. Indeed, one can argue that it is a forerunner to the discourse on knowledge societies, defined by Andy Hargreaves as societies that 'process information and knowledge in ways that maximize learning, stimulate ingenuity and invention, and develop the capacity to initiate and cope with change' (Hargreaves, 2003, p.3). The Unesco report, *Towards Knowledge Societies*, adds that 'a knowledge society is a society that is nurtured by its diversity and its capacities', fosters knowledge sharing, and leads to producing more relevant knowledge for the countries of the South. This means that institutions of higher learning have to be responsive to social issues, the world of work, culture, disadvantaged and marginalized groups, other levels of education, and 'everywhere and all the time' (Unesco, 2005, p.97).

Conventional knowledge production has also been severely criticized in cultural studies, critical theory, feminist theory and postcolonial studies circles. There is a vast literature on the subject mostly focussed on the politics and the hegemonic tendencies of (western, modernist, male dominated) production of knowledge and seeks to 'decolonize' it. The colonising nature of social science disciplines has been highlighted in such noted works as *Anthropology and the Colonial Encounter* (Asad, 1973), *The Origins of American Social Sciences* (Ross, 1991), and *Sociology and Empire; The Imperial Entanglement*

of a Discipline (G. Steinmetz, 2014). More recently, the discourse is summed up by Ramaswami Harindranath in a special issue of *Post-colonial Studies* on 'Decoloniality, Knowledge and Aesthetics'. 'The "decolonial turn"', writes Harindranath,

> seeks to make critical interventions into global academic politics in terms of conceiving a vocabulary that both undermines existing Euro-American frameworks and is more relevant to understanding contemporary political, social and cultural formations in the Global South that take into account both the history of colonialism and, critically, the continuing implications of colonial form of knowledge production and structures in these formations (Harindranath, 2014, p.110).

This critique is a response to the crisis in western academia, a reaction to the 'racialised and colonized subjects in modernity' and seeks 'epistemic disobedience' with the aims of dethroning western epistemology (Harindranath, 2014, p.110).

The 'indigenous knowledges' movement has similar goals. In the US, its most intellectually vocal voice is Ward Churchill (Keetoowah Cherokee), a former leader of the American Indian Movement of Colorado and Professor of American Indian Studies at the University of Colorado. Churchill has attacked the American knowledge industry in his numerous books, such as *Fantasies of the Master Race* (1999) and *Act of Rebellion* (2003). In his famous essay, 'White Studies: The Intellectual Imperialism of Higher Education', Churchill argues that 'the American educational system as a whole has been amply demonstrated to be locked firmly into a paradigm of Eurocentrism, not only in terms of its focus, but also in its discernible heritage, and conceptual structure' (Churchill, 2002, p.8). This

> system of Eurosupremacist domination depends for its continued maintenance and expansion, even its survival, upon the reproduction of its won intellectual paradigm – its approved way of thinking, seeing, understanding, and being – to the ultimate exclusion of all others' (Churchill, 2002, p.25).

The 'indigenous knowledges' school seeks to 'legitimate indigenous knowledges and philosophies as ways of knowing in their own right' and hence transform the academy. Considerable literature has been produced on the subject in recent years – some of it brought together in the excellent *Indigenous Philosophies and Critical Education: A Reader* (Sefa Dei, 2011). Nowhere is this project taken more seriously than in Latin America. Jose Jorge de Carvalho and Juliana Florez-Florez describe the continent-wide 'Meeting of Knowledges' project, a transdisciplinary theoretical and political intervention that aims to decolonize universities in the region. All Latin American universities, established by the Spanish largely as Catholic institutions, are neo-colonial, note de Carvalho and Florez-Florez,

> because they accepted the hierarchy of knowledge imposed by settlers who validated European scholarly knowledge in order to disqualify, censor and exclude Indigenous, Africa and other traditional peoples' ancestral knowledges, which were consolidated during the five centuries of western domination in the continent. For every area of Indigenous or Afro-Brazilian knowledge, Western knowledge has developed a specific mode for dismissing its intrinsic value. The sciences and technologies of our traditional people were considered erroneous because they had not been modelled mathematically; their History was also unacceptable because it did not separate mythological from historiographical accounts; their Geography was dismissed because it was suppose to lack mathematical precision to project distances and relative altitudes; their Medicine was considered untrustworthy because it was not "scientific" in the sense that it didn't use accurate instruments, procedures; and so on. Thus, all the foundations of modern Western knowledge were projected against the Latin American continent (and the South in general) to justify domination and exploitation of the continent's resources. Obviously, this has been sustained by military superiority, the last support for the legitimation of the supposedly epistemic superiority of Western nations over the rest of the peoples of the planet. (de Carvalho and Florez-Florez, 2014, pp.125-126).

The 'Meeting of Knowledges' project focusses on recovering this lost heritage, as well as exposing the inherent biases of the conventional production of knowledge. The first aspect of the project, write de Carvalho and Florez-Florez, is the 'true epistemic renovation' of traditional knowledge. Masters of indigenous knowledge still alive are brought into the academy as professors and researcher at universities. The process is open, inclusive, non-sectarian and based on equality. However, the openness should not be confused with cohesion: 'the Meeting of Knowledges sets an attitude capable of embracing differences in a space of dialogue, even at the point of sustaining axiological and ideological incommensurabilities between differences. This means Afro, Indigenous, popular, traditional and modern knowledges are not necessarily equalized: they are all valid, but one cannot substitute for the other'. Thus, decolonising the university does not mean the exclusion of modern knowledge; the decolonising process is not an attack on Europe – it is to point out that modern European knowledge is one amongst other forms of knowledge. However, it does require questioning the Eurocentrism of modern knowledge and its claims to be universal (de Carvalho and Florez-Florez, 2014).

So, the forces driving change in higher education do not just include 'globalization, emergence of knowledge society, and accelerating change' (Moravec, 2008) but also the emergence of new modes of knowledge production, as well as attempts to decolonize knowledge. While these trends are often analyzed individually, they are seldom treated as an interconnected whole, and little attempt is made to understand the complex interactions among them. Collectively, these trends point towards the fact that the social, epistemological and technological conditions that supported the disciplinary pursuit of knowledge production are coming to an end; and the emerging realization that higher education, learning and research must shift from what knowledge must be acquired toward how to create new knowledge that has relevance in a particular context, to a particular community, in a particular situation (Moravec, 2013). At the very least, the mission of the universities must change 'from gatekeepers of knowledge to curators, creators, connectors, certifiers and codifiers

of knowledge' (Wolfe and Andrews, 2014). But beyond that, we need new paradigms of higher education.

PARADIGMS: OLD AND NOT NECESSARILY NEW

While calls for new paradigms in higher education are on the increase, there is little consensus on what the new paradigms ought to be, could be, or should be. By the original definition of Thomas Khun, a paradigm is a set of beliefs within which knowledge is produced, researched, and developed. It provides a metaphysical framework for inquiry, and a worldview that defines the nature of the world, our place in it, and how we as individuals and communities interact with the world and its parts. So a change in paradigm ought to involve a change in the basic set of beliefs, metaphysics and worldview – there is not much evidence that this is happening. In the social sciences and humanities, a paradigm may be understood 'as a framework of three questions pertaining to ontology (the nature of reality, or a worldview), epistemology (the relationship between the knower and the known) and methodology (a way to establish the validity of a particular worldview' (Bates, 2016, p.73). But the problem is that 'no methodology can establish the "ultimate truthfulness" of a worldview framed with a particular paradigm'. So new methodologies within the existing paradigms are not going to take us to a new paradigm. The discourse on new paradigms is thus caught in a bind; it seeks to create a new paradigm using methods based on the old paradigm, and the old paradigm does not permit jettisoning of the metaphysical structure that sustains it.

Not surprisingly, just as there is a great deal of confusion on 'rethinking universities', there is a great deal of perplexity about the nature of the new paradigms. Suggestions range from the banal ('there is a common agreement that a change in the mindset of students and their families about spending, especially in minority communities, is critical' (Hayes, 2012) to the obvious ('educators must understand the folly of divorcing education from lived experience: a flawed notion that education can be neutral' (Chege, 2009); to those that involve

working simultaneously on local, global and individual levels to foster human development (Cheng, 2005), creating purpose-centred system of education (Cohen, 1993), nurturing education system (de Souza et al., 2013), education based on the philosophy of pragmatism (Johnson and Onwuegbuzie, 2004), and education based not on a knowledge paradigm of human capital theory but on 'human development and capability theory' (Mehrota, 2005).

Part of the problem is the lack of a clear definition of what constitutes a paradigm shift. Thompson Jr., for example, thinks that simply moving to a developmental model will lead to a new paradigm: 'just as the shift to make student learning, rather than teaching, central constituted a paradigm shift, adopting a developmental model constitutes a new paradigm for undergraduate education. The impetus for the new paradigm comes from the social contract, higher education's responsiveness to twenty- first-century societal needs, and advances in developmental science' (Thompson Jr., 2014). J. Zadja proposes that 'the most innovative idea is the notion of the "global security" model as a new paradigm' both for education and human survival' (Zadja, 2002). Watson et al. insinuate that salvation will come from technology: 'a new learning-centered paradigm of education must be realized, and technology that is systematically applied to the entire learning process and that focuses on this new paradigm must be available if the new transformation is to be successful and timely' (Watson et al., 2012). Harbour and Wolgemuth would be happy with 'a new democracy-based normative vision of a public higher education. Such a vision would prioritize student growth, equity, and access. It could also serve as the foundation for new progressive policies which would affirm that public colleges and universities are much more than instruments of economic development' (Harbour and Wolgemuth, 2013).

Others resort to existing theories to create a new paradigm. Cheng, for example, places his faith in the theory of multiple intelligences, which sees intelligence as different modalities rather than a single ability. He emphasizes the importance of localization and individualization and suggest that,

in the new paradigm, human nature in a social context of the new millennium is assumed to be multiple, as a technological person, economic person, social person, political person, cultural person, and learning person in a global village of information, high technology, and multicultures…Life-long learning individuals and a learning society (or knowledge society) are necessary to sustain the continuous multiple developments of individuals and the society in a fast changing era. From the view point of the CMI (contextualized multiple intelligences) theory, the society has to tend towards a multiple intelligence society that can provide the necessary knowledge and intelligence base and driving force to support the multiple developments. (Cheng, 2000).

In contrast, Buendia and Morales argue that 'a new educational paradigm for evolving development' is located in andragogy – the theory and practice of adult education. They propose 'the development of a discipline called Pandragogy' which 'would help both, individuals and groups to learn by creating their own meanings promoting lifelong learning, community, and sustainability'. In the andragogical model, they explain, learning rather than teaching is more important. 'The knowledge of the group, including the facilitator, is constantly being developed through joined planning, application, and evaluation of learning. With this method, it is promoted that the facilitator as well as the participants can develop new ways of thinking about what and how they are learning'. (Buendia and Morales, 2003, p.565). Another new paradigm is said to be designed-based research which problematizes interventions, has 'power to generate knowledge that directly applies to educational practice' and produces a better account of teaching and learning (Design-Based Research Collective, 2003).

Of course, there is nothing really new in all this. As far back as 1998, Skolnik complained that there is 'no "big" intellectual concept of the 20th Century which has been trivialized to the extent of Kuhn's notion a paradigm shift. The term, paradigm shift, seems to be applied to the smallest change in viewpoint, and it is difficult to attend

a seminar on any subject these days which does not promise that participants will experience a paradigm shift' (Skolnik, 1998). There are two main reasons for the clearly dominant tendency to hark back to widely circulated notions and theories. First, as English and Ehrich explain, is the logic of the field – the very practice of educational research. The field contains what are seen as right, correct, orthodox, dominant visions – what Pierre Bourdieu (1998) called 'doxa'. When an intellectual struggle occurs between different visions within a field which is loosing legitimacy, doxa is imposed by an external agency or from within to provide much needed legitimacy. The very fact that 'the overwhelming approach to truth seeking' is 'nested in positivistic/ behavioural empirical methods' means that 'innovation outside of this tradition looks improbable. To be able to confront this kind of methodological doxa would lead to a confrontation with long traditions in the field. Researchers cannot think outside of their methods because these methods define the reality they perceive. And empiricism is unable to live by its own dogma which is that phenomena not observable are not real' (English and Ehrich, 2015). So the intellectual struggle for a new paradigm often ends with the old paradigm reasserting itself. Second, the nature of change itself is daunting, perplexing and complex, and it is being driven by what appear to be uncontrollable capitalist and technological forces. As Schejbel notes,

> the future is now here; and a perfect storm is on the horizon for higher education. State and national governments are weak, and political processes are contentious and fractious; unemployment is high, the economy is bad, and people feel poor. Public support for anything is rapidly eroding; higher education is expensive, and it is becoming inaccessible to many because costs have outpaced inflation for years. Artificial intelligence is no longer science fiction; and the capitalist quest for better, faster, and cheaper is driving change (Schejbel, 2012, p.378).

Thus, attempts to create genuinely new paradigms seemit to be going no where very quickly. What has been happening is that different

disciplines have been trying to impose their on logic of the filed – doxa – on educational reform. A point that was well made by Gage way back in 1989. We have to realize, writes Gage, that 'the paradigm wars in educational and social research are in part wars between the disciplines. It was psychology, in large part, that bred the objective-quantitative approach to research on teaching. It was anthropology, in large part, that spawned the interpretive-qualitative approach. It was mainly the work of analysts from economics, political science, and sociology that produced critical theory' (Gage, 1989). So the status quo has been maintained by the methods that emerged form the old paradigms, ensuring that more things change, more they stay the same.

However, there is general consensus amongst the reform minded scholars that the journey towards new paradigms should take account of sustainability and transdisciplinarity, emerging complexity, and be firmly focused towards the future.

SUSTAINABILITY AND SUSTAINABLE FUTURES

Sustainability itself is not a new paradigm. Its origins lie in *Our Common Future*, also commonly referred to as the Brundtland Commission report, which argued that all development, as least in theory and broadly defined, must be sustainable. As defined by the report, sustainable development 'meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland, 1987). What is most compelling about the Brundtland definition is that it is decidedly forward-looking. The term has come to describe a wide variety of ecologically sound and future-oriented practices.

The advent of sustainability sent shockwaves throughout almost all educational disciplines and academic fields; and sustainability, often used synonymously with 'sustainable development' has now become a 'normal' discourse. Over the last two decades, considerable literature has been produced on sustainability, with an accent on sustainable development. The term is now widely used by reform-

minded academics and institutions, especially those seeking new paradigms suited to the challenges and opportunities of the 21st century. Given the Brundtland definition's emphasis on 'future generations', one might think that there will be a great deal of focus on the needs and requirements of future generation; unfortunately, this is not the case, and most of the literature is devoted to solving the challenges of today with little effort actually spent imagining and/or modelling the needs of future generations. And most of this problem-solving is framed within the old but much discredited concept of 'development'.

Take Firth's *A Sustainable Future* (2012), which was designed as a teaching resource for sustainability-minded educators. Although Firth provides a brief, yet thorough, introduction to the primary challenges of sustainability with a particular emphasis on climate change, he gives no insights or pedagogical tools for imagining future(s) possibilities. The same can be said of the lengthier and academically rigorous *Higher Education and Sustainable Development: A Model for Curriculum Renewal* (2014) by Desha and Hargroves. The editors have assembled an impressive model for curriculum renewal, specifically within the engineering disciplines, but the text lacks a forward-looking orientation, even though they decry the endemic 'short-termism in the higher education sector' (Desha and Hargroves, 2014, p.44). At best, the text offers a listing of future career trajectories:

> while fundamental knowledge and skills (including statics, dynamics, thermodynamics and fluid mechanics) will continue to form the basis of engineering education, new knowledge and skills associated with sustainable development will be required to be integrated into programs (including low carbon electricity production, resource efficiency, green chemistry, green buildings, industrial ecology, fuel cells and advanced water management)' (Desha and Hargroves, 2014, p.33).

Sustainability, of course, seeks to 'sustain'. But the key question of what we are seeking to sustain is either left unanswered or is assumed to be the preservation of neo-liberalism and the free market

economy. The current trend in higher education, as Barth et al. point out in *Routledge Handbook of Higher Education for Sustainable Development* (2016), is towards addressing sustainability through curriculum, research, and outreach. Indeed, the output on sustainable education, Barth et al. show, has increased exponentially since the Brundtland Commission report. But what is sustainability education geared towards? Primarily at creating 'competencies for a sustainable socio-economic development' and 'sustainability driven entrepreneurship'. The mega EU project, 'Competencies for Sustainable Socio-Economic Development' (CASE), that involves a host of universities across Europe – from Austria to Sweden – has precisely the same goals. So does this mean, as Beynaghi et al., (2014) suggest, that, specially after the 2012 UN Conference on Sustainable Development (Rio + 20) in 2012, higher education for sustainable development 'could be interpreted as the seed of newly emerging mission for universities'?

Not quite. There is considerable criticism of sustainable development which sees the 'new mission' as a reworked old undertaking of maintaining the status quo. As Medovoi observes, 'sustainability typically advances a narrative that introduces the damage (the 'inconvenient truth' of the narrative's dark first half) before the moral call to action (launching sustainable practices and natural capitalism) is proposed with the aim of averting crisis and recuperating the future' (Medovoi, 2010, p.143). The problem with sustainable development is the notion of development itself which is deeply embedded in monetarist economic policies. There is also the suggestion that sustainability has now been co-opted by the academy and made subservient to capitalism. Its role has been diverted from ecologically sound, futures oriented policies to solving the problems of western society without questioning its basic norms and values. It is being used to justify industrial practices and technological developments that enhance the social and ecological impact of capitalism. As a result, the very notion of sustainability is being increasingly questioned; and some see the need for an entirely new paradigm – one rooted in the ethos of sustainability but also willing to reimagine higher education from the

ground up. In *Higher Education and Sustainable Development: Paradox and Possibility* (2009), Gough and Scott proclaim that 'a further social paradigm shift is now needed (or is actually emerging), made necessary by phenomenon such as:

- The failure of science and technology to solve problems of poverty, starvation, disease and environmental degradation;
- The emergence of risks that appear to have been 'manufactured' through the industrial application of science and technology (Beck, 1992, 1999);
- Environmental crises on unprecedented scales;
- Growing disillusionment with consumerism and/or globalization (Gough and Scott, 2009, p.16).

This paradigm is almost with us, argue Gough and Scott, and in fact, there is a growing list of examples of pedagogical and institutional frameworks responding to the entrenched challenges as well as seeding systemic change, although the impacts of these efforts are difficult to measure. What stifles creative experimentation is the drive to quantify, which is deeply rooted in long-held administrative practices of many higher education institutions. If sustainability becomes an 'academic specialism', warn Gough and Scott, it would lose its transformational capacity. And many think it already has.

Criticism of sustainable development has led to the emergence, during the last ten years, of the new discourse of 'sustainable futures' (Tonn, 2007; Conway, 2012; Su et al., 2012; Kempen, 2014). As the name suggests, it is more future oriented, but it is also more grounded in ecology and ethics, and more focussed on producing pragmatic pedagogic methods. Rob Fleming's *Design Education for a Sustainable Future* (2013), for example, provides a vision for what the design discipline can and might achieve should it tap into the transformational power of sustainability. Focussing on the need for inclusion, Fleming champions participatory ways of knowing and action learning rooted in past, present, and possibilities for what might lie ahead, which is also to say that he explicitly gestures toward the needs

of future generations. 'Evolving the design professions to higher states of consciousness', writes Fleming, 'does not demand a paradigm shift so much as it does the *transcendence* to a new more integrated world view, and the *inclusion* of all preceding world views' (Fleming, 2013, p.4). While Fleming's proposition may seem daunting, particularly in regard to how one might include all preceding world views, his invocation of transcendence emphasizes the critical need for moving past obsolete research and teaching models within higher education. Fleming also notes and challenges the entrenched power dynamics within ongoing global discourses on higher education, which he views as a threat to scaling up sustainable research and teaching practices. 'How will the largely Caucasian dominated design academies overcome years of privilege to build more diverse and inclusive learning communities? How will the design professions let go of their tight control over discipline territory to open opportunities for meaningful collaboration?', he asks (Fleming, 2013, p.5). As with many of his contemporaries, Fleming's strength lies in raising questions rather than providing answers, and his emphasis on 'tiny revolutions', which are strategic interventions aimed at chipping away at traditional institutional structures, offers a modestly hopeful vision of reform in higher education.

The focus of sustainable futures on curriculum and education also looks promising. There is a great deal of emphasis on how ethics can be incorporated within university courses, how priority can be given to diversity and cultural concerns, and how a critical questioning attitude can be inculcated in students and professors alike. Steve Keirl, as an example, suggests that students have to politically engage with three prime drivers of the last decades: extreme capitalism, multiple globalization, and subversion of sustainability by neo-liberalism – in essence, students have to be ushered away from the doctrinaire aspects of higher education. He offers a sustainable-democratic curriculum based on ethos, consciousness, discomfort and conversation and co-learning of students and professors in cooperation, collaboration and competition – so that education becomes a critically experienced process (Keirl, 2015). The most recent thinking on sustainable futures and

its role in paradigm shift in higher education is presented in the collection edited by Stables and Keirl (2015).

A guide for teaching and learning sustainability in higher education, a toolkit rather than a step-by-step model for curriculum and pedagogy design, is presented by Stephen Sterling's *The Future Fit Framework* (2012). Sterling's work is located within the broader context of the United Nation's Decade (2005-14) of Education for Sustainable Development (ESD), which was a large-scale education reform project managed by UNESCO. Offering practical insights and real-world strategies for modelling sustainability within existing classroom and research practices, the Future Fit Framework now serves as one of the key priority areas of the Higher Education Academy, which is a UK-based organization focusing on enhancing learning and teaching in higher education. In contrast to many of his contemporaries, Sterling devotes a significant amount of time and energy to the area of values, which many see as the starting point for systemic change. He stipulates an expansive list, which has emerged in the sustainable futures discourse:

- sufficiency (living lightly);
- equity and justice (intragenerational and intergenerational);
- social inclusion and meeting basic human needs;
- participation and empowerment;
- eco-efficiency (in resource use);
- biodiversity and green space;
- human rights and needs;
- ethical investment and fair trade; sustainable consumerism;
- animal and biocentric rights and needs;
- democracy and participation;
- resource conservation and efficiency;
- community and mutuality;
- meeting needs locally;
- resilience and durability;
- system health and well-being;
- futurity (taking the future into account today) (pp.34-35).

That Sterling makes explicit mention of 'futurity', which is a less-used synonym for futures studies or foresight, as a value rather than as a strategy or approach, is quite telling, if only as few others do so. Indeed, Sterling's pioneering work has been canonized within some cutting-edge graduate programs, including Portland State University's MA in Leadership in Sustainability Education, which was one of the first in a rising number of programs in this area. In his earlier work, *Sustainable Education: Revisioning Learning and Change* (2001), Sterling challenges the mechanistic and industrial-era paradigm of higher education while outlining a vision for systemic change rooted in the core concept of wellbeing – a designation that expands the nature of the conversation about sustainability while simultaneously invoking the needs-based framing of the Brundtland Commission report. Reflecting on the potential impact of sustainability's emergence, Sterling notes, that 'the comparative newness of the sustainability agenda, the interdisciplinary and transdisciplinary nature of the area, the need for learner-center approaches, "green management" and organizational learning, all pose a challenge to established norms' (Sterling, 2001, p.71). Although much of the newness of sustainability has worn off since Sterling penned these words, his insight about threatening norms is just as important, even more so, than it was over a decade ago. Based on the work of Sterling and others, the sustainable futures discourse is challenging established norms, especially with regards to how the complex problems of sustainable development are seen and understood within higher education.

Sustainable futures aims to infuse systems thinking, complexity and futures methods in its approach. In their edited volume, *Education for a Sustainable Future: A Paradigm of Hope for the 21st Century* (2000), Wheeler and Bijur explain how this is done. They highlight the importance of systems thinking – the process of understanding how systems, a set of interconnected or interdependent components, influence one another – 'collaborative academic work' and 'the skills of community participation and community-making' for students. They also emphasize the importance of visioning – a planning process that centres on defining the parameters of one's preferred future.

Rather than providing a formulaic or step-by-step plan, visioning acts as a tool for navigation and offers, at best, guideposts to keep one moving in preferred directions. The role of *Complexity Theory for a Sustainble Future* is explored by Norberg and Cumming (2008), who are concerned with how one might transform institutional paradigms. While they focus mainly on the conservation of nature, their invocation of a complexity approach provides valuable insights for reform across higher education. Norberg and Cumming also highlight the relevance of 'visioning and scenario planning', and the critical role of diversity as a force for transcending the limits of the present: 'a central focus needs to be put on the processes that affect the diversity within a system, since these affect our future options' (Norberg and Cumming, 2008, p.290).

The issue of the nature and role of disciplines emerges frequently in the discourse of sustainable futures. In *Sustainable Knowledge: A Theory of Interdisciplinarity* (2014), Robert Frodeman makes the case that philosophy, which sees itself as the mother of all disciplines, should lead the charge by venturing out into the wild to tackle real-world challenges. Both philosophy and humanities have to reinvent themselves for the sake of sustainability and undertake the systematic, Socratic task of providing a historical and philosophical critique of society. Interestingly, but perhaps not surprisingly, Frodeman does not believe that jettisoning disciplines is necessary, which some see as a precondition for reforming higher education and the emergence of radically new paradigms. While philosophy ought to play a role in forming the right questions related to sustainable futures, Frodeman's account of the 'philosopher bureaucrat' and 'field philosopher' seems to be more about 'de-disciplining' philosophy than actually confronting the challenges of sustainability within higher education. In contrast, Jacques Rancière, best known for his work in political theory, is firmly against disciplinary structures. In a 2008 interview, Rancière declared, 'the apportionment of disciplines refers to the more fundamental apportionment that separates those regarded as qualified to think from those regarded as unqualified; those who do the science and those who are regarded as its objects'. Sustainability, then, ought

to endeavor to be 'interdisciplinary', which 'is not only a matter of going besides the disciplines but of breaking them' (Baronian and Rosello, 2008).

The overall emphasis in sustainable futures, however, is not on breaking disciplines but working within inter- and transdisciplinary frameworks.

TRANSDISCIPLINARITY: SHAPING NEW PARADIGMS

While the emergence of sustainability within higher education ignited a new conversation about disciplinary constraints and research practices, social movements in the 1970s and 1980s had already raised the problems associated with modes of inquiry within single disciplines. Question about the entrenched power of traditional disciplines were raised leading to profound questions about the nature and practice of higher education itself. Was higher education prepared for the challenges of life in times of dramatic change? Could higher education be part of the solution(s) to complex problems? How might higher education move from being complicit in 'colonizing the future' (Sardar, 1993) and contribute toward envisioning more just and egalitarian futures? In answering these and other questions, many saw the old paradigm – one where each discipline produced knowledge within its own specialty silo – as anachronistic and unsuited to the challenges and opportunities to come. Following the publication of the Brundtland Commission report, the discourse on interdisciplinarity expanded from one centered on the development of new areas of study to bridging disciplinary gaps as a means of producing and integrating new knowledge; and many scholars were keen to see this concept evolve into the centrepiece of a new paradigm for higher education (Klein, 1990; Nissani, 1997; Haynes, 2002). As defined by the National Academies, interdisciplinarity is undertaken 'by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline

or area of research practice' (2005). With an emphasis on advancing knowledge and integrating diverse perspectives and approaches, the promise of interdisciplinary research and practice to deliver sustainable solutions remains a powerful refrain within higher education, but some continue to question this approach's efficacy and outcomes.

Resources and critical analyzes on interdisciplinarity have grown tremendously during in the past few decades. But most, if not all, observe Jacobs and Frickel, fall primarily into one of three categories: interdisciplinarity 'is lauded as an ideal, scorned as a threat, and embraced as a practice' (Jacob and Frickel, 2009, p.44). The conceptual clarity offered by the National Academy and others enabled many academics and scholars to claim that they practice interdisciplinarity, but questions about what actually constitutes interdisciplinary research and practice (Stember, 1991) and the assumed 'superiority of interdisciplinary over disciplinary knowledge' (Jacobs and Frickel, 2009, p.60) continued to be raised. Individual disciplines have developed clear metrics to measure knowledge production, which are often driven by internal experts, but in charting new waters, evaluating interdisciplinarity is difficult and remains a point of contention amongst both proponents and critics. Keeping some disciplines intact in turbulent times – as, for example, Frodeman argues in the case of philosophy, or economists maintain in the face of mounting criticism – has become one of the hallmarks of interdisciplinary research and practice. Naturally, this has also raised serious concerns about the assumptions and agendas underlying such initiatives.

One – or perhaps the main – reason for continued tension regarding interdisciplinary research and practice is the confusion and conflation between different varieties of disciplinarities. Just what is the difference between intra-, multi-, cross-, inter- and trans- disciplinary approaches and research? Jensenius provides some indication in a set of graphics that visualize how each approach operates in both theory and practice.

Intradisciplinary ➤ Multidisciplinary ➤ Crossdisciplinary ➤ Interdisciplinary ➤ Transdisciplinary
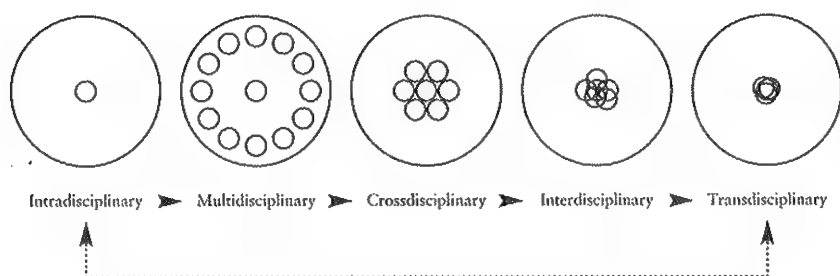
Intradisciplinary is simply working within a single discipline; cross-disciplinary inquiry views one discipline from the perspective of another; multidisciplinary research has 'people from different disciplines working together, each drawing on their disciplinary knowledge'; interdisciplinary methods aims at 'integrating knowledge and methods from different disciplines, using a real synthesis of approaches'; and transdisciplinary approach sets its goals at 'creating a unity of intellectual frameworks beyond the disciplinary perspectives' (Jensenius, 2012). However, as Jensenius shows, while interdisciplinary research and practice aims at a blending and blurring of disciplinary boundaries, one can and might still identify the contours of contributing disciplines, which is to say that it continues to support the production and, perhaps most importantly, the synthesis of disciplinary knowledge (Jensenius, 2012). This synthesis, however, leaves the contributing disciplines in tact and often does little to transform practice within the discipline itself. This is because interdisciplinary collaborations are seen as secondary to knowledge production within the discipline and end when the funding for such initiatives runs out (Stember, 1991; Jacobs and Frickel, 2009).

Moving beyond disciplines and championing an inquiry-driven approach, transdisciplinarity has recently become the rallying call of reform-minded educators seeking both new paradigms and a means to disrupt research and practice in higher education. The term was first introduced by Jean Piaget (1972) to point out the need for going beyond the mere synthesis of disciplinary knowledge and moving toward the formation of knowledge without disciplinary boundaries (Bernstein, 2015). Given its shift in focus and locus, transdisciplinary

requires allegiance to the ethos of the project rather than disciplinary custom and tradition, which enlivens and necessitates novel exchanges between teams undertaking such work. This point was put forward by Basarab Nicolescu, a Romanian physicist, one of the main initiators of the First World Congress on Transdisciplinarity (1994), which led to the World Charter on Transdisciplinarity (Bernstein, 2015). Although regarded as a major breakthrough, the Charter's bombastic language left many feeling that it was more of a manifesto than a unifying statement of purpose and binding academic treatise. The Charter has also been criticized for being utopian and a bit conservative in the way it frames the tenets of transdisciplinarity, especially its core capacities:

> Rigor, opening and tolerance are the fundamental characteristics of the transdisciplinary attitude and vision. Rigor in argument, taking into account of all existing data, is the best defense against possible distortions. Opening involved an acceptance of the unknown, the unexpected and the unpredictable. Tolerance implies acknowledging the right to ideas and truths opposed to our own (Nicolescu, 1994)

While transdisciplinarity offered a new framework for modes and means of inquiry, many questions emerged about how to practice transdisciplinarity, particularly when it requires new conversations about meaning and values – topics that not all disciplines are suited to undertake. As Semetsky argues, 'transdisciplinary knowledge belongs to what Nicolescu specifies as *in vivo* knowledge that exceeds scientific knowledge of the external world as independent from the subject. Bound to the internal world of human subjectivity, it necessarily includes a system of values and meanings exceeding objective facts alone' (Semetsky, 2010, p.35). If one takes Semetsky's postulate at face value, then transdisciplinary poses a direct threat to one of the pillars of disciplinary higher education – the presumption of objective inquiry.

Of course, using values as a hub or point of entry for inquiry is not unique to transdisciplinarity. However, bringing different disciplines together, if only to dissolve them, is a step beyond synthesis

and a step forward towards the production of truly new types of knowledge. One way to practice transdisciplinarity, Klein suggests, is to frame it as a meta-approach, which can and might also be read as a new paradigm; and like Fleming (2013), argues for transcendence. 'As an epistemological project', he writes, transdisciplinarity 'will be aligned more closely with the discourse of transcendence. As a method of knowledge production, it will be linked with utilitarian objectives, although they range from manufacturing new products to new protocols for health care and environmental sustainability. As a form of critique, it will continue to interrogate the structure and logic of the university and its role in society' (Klein, 2014, p.73). Bocchi et al. offer a clearer argument for how and why transdisciplinarity may take us towards a new paradigm. Transdisciplinarity, they suggest, 'should address the construction of knowledge' through 'the explicit and implicit assumptions that form the paradigm through which various disciplines and perspectives build up knowledge, and which inform research on the topic, including our own'. They continue: 'it should involve complex thought and an understanding of the organization of knowledge, isomorphic at a cognitive and institutional level, of the history of reduction and disjunction (what Morin (1994, 2008c) calls "simple thought") and of the importance of contextualization and connection (or "complex thought")' (Bocchi et al., 2014, p.341). With its inherent emphasis on complexity, transdisciplinary research and practice within higher education may act as a catalyst to foment knowledge production that could, in both content and form, produce new paradigms as well as challenge institutional limits and frameworks.

That transdisciplinarity is seen as a method or approach rather than paradigm is regarded by many scholars as a strength rather than weakness, if only to keep it from being reified and consumed by existing modes of inquiry within higher education. Maintaining a recalcitrant ambiguity – one that offers a cogent challenge to business-as-usual academics – transdisciplinarity can harness and create further discursive and actual power by aligning with other emerging critical modes of inquiry. As Darbellay notes, when transdisciplinarity 'is aligned with both post-normal science and Rittel and Webber's

definition of wicked problems (Rittel & Webber, 1972), the discourses of transgression and problem solving combine, breaking free of reductionist and mechanistic assumptions about the ways things are related, as how systems operate, and the expectation science delivers a single "best" solution or final answers'. (Darbellay, 2015, p.72).

COMPLEXITY AND COMPLEX SYSTEMS

Along with transdisciplinarity, there is also a clear shift towards complexity. Once again, complexity itself is not a new paradigm; it has been around since the early 1990s when the Senta Fe Institute in New Mexico started publishing its pioneering work on 'complex adaptive systems' (Waldrop, 1992). The initial work was directed towards science: mostly on physics and biology and led to the emergence of chaos theory, econophysics and systems biology (Kauffman, 1992). However, complexity soon moved into social sciences (Kiel and Elliott, 1997; Eve et al., 1997) but the emphasis remained on quantitative analysis (what Eve at al called 'reliable measures') of political science, economics and management within interdisciplinary and multi-disciplinary perspectives. There was one caveat: complexity brought the ideological character of social sciences to the fore. As Harvey and Reed (1997, p.296) point out in the Keil et al. volume, most scholars 'implicitly assume that there is only one social science and only one scientific method'; complexity challenges this 'methodological assumption' and suggests that 'no single method can fully appreciate the manifold complexity of social life'.

So what is complexity? And what is its relevance to higher education?

To begin with we ought to differentiate between what is complicated and what is complex. A complicated system is like a knotted ball of wool: it may take time and considerable effort, but the knots can eventually be undone. Engineering, which has no more than six variables, is a good example of a complicated system. Complex systems present us with a totally different phenomenon. A complex

system is like an intricate and elaborate web in which everything is connected to everything else. It is impossible to detangle the web; the more you struggle the more entangled you become. Hence, problems associated with complex systems are said to be 'wicked', not because they are evil but because they are impossible to resolve in conventional ways given their interconnected, interdependent, and deeply entangled nature. The world itself, Dilger (2012) tells us, is becoming complex.

> There are more people than in the past to begin with. Societies are more complex and more interconnected than before. There is a lot of progress in science, technology and economy, further increasing the total complexity. The internet is not only connecting people all over the world but also contains an increasing amount of data with exponential growth. It would take more than one lifetime to view and read everything that is newly generated every day. This is even true for the sub field of academic literature. At least the quantity if not the quality of new data is totally overwhelming. Moreover, while many data are quite simple or even just noise the complexity and depth of science and technology is increasing. For example, newer computers are not larger but smaller and much faster and more efficient than the older ones (Dilger, 2012, p.50)

During the last decade, complexity theory has evolved considerably. It consists of a number of central tenets. We can think of complexity, writes Page, 'as intersecting structures and patterns that are not easily described or predicted. Systems that produce complexity consist of *diverse* rule-following entities whose behaviors are *interdependent*. These entities interact over a *contact structure* or *network*. In addition, the entities often *adapt*. The adaptation can be learning in a social system, or natural selection in an ecological system' Page (2012, p.17). Or to put it more simply, a complex system consists of a number of different entities that interact over a network, which can be a computer network, a geographic space, a market, on ecosystem, or a group of individuals, communities or institutions. The richness of the interactions allows the system to undergo spontaneous self-

organization: 'people trying to satisfy their material needs uncon-
sciously organise themselves into an economy through myriad indi-
vidual acts of buying and selling; it happens without anyone being in
charge or consciously planning it. The genes in a developing embryo
organize themselves in one way to make a liver cell and in another
way to make a muscle cell. Flying birds adopt to the actions of the
neighbours, unconsciously organizing themselves into a flock' (Wal-
drop, 1992, p.11). Moreover, these complex, self-organising systems
are *adaptive* – that is, they actively turn whatever happens to their
advantage. The adaptation can be a learning process in a social system
or natural selection in an ecological system. If the entities in a complex
system adopt then they develop greater capacity to respond to their
changing environment. Complex adaptive systems have another im-
portant characteristic: they are capable of producing *emergence*: that
is, a different order of structures and functions that arise from the
interactions in the network. Emergence can be both positive or neg-
ative. Ants can build bridges. Cultures can transform themselves and
become innovative and dynamic. Computer networks can crash. Mar-
kets can collapse. Complex systems tend to be large, contradictory,
and are capable of producing large events. This is why 'complexity is
hard to measure' (Dilger, 2012).

Complex systems have other important features. A complex system
consisting of networks in which independent parts are connected
and interact with each other, can generate *positive feedback*: a loop
mechanism that amplifies things in geometric proportions. The out-
come of great many independent variables interacting in many dif-
ferent ways in a networked complex system generating positive feed-
back is *chaos*. Chaos has been defined in a number of ways from 'a
kind of order without periodicity' to 'the qualitative study of unstable
aperiodic behaviour in deterministic nonlinear dynamical systems'
(Kellert, 1993, p.2). An interesting definition was provided by Edward
Lorenz, the pioneer of chaos theory: 'when the present determines the
future, but the approximate present does not approximately determine
the future'. A popular definition is provided by the science journalist,
Roger Lewin: 'from the interaction of the individual components

down here emerges some kind of global property *up here*, something you couldn't have predicted from what you known of the component parts' (Lewin, 1993, p.12). Such systems have the ability to balance order and chaos. This balancing point is called the *edge of chaos*: it is where the system is in a kind of suspended animation between stability and total dissolution into turbulence. At the edge of chaos, complex systems can collapse or self-organize into a new order. 'Another distinguishing characteristic of chaotic systems is their sensitive dependence on initial conditions – infinitesimally small changes at the start lead to bigger changes later' (Sardar and Abrams, 1999, p.26). What all this means is that a complex, networked system is full of uncertainties, multiple perspectives, and prone to turbulent behavior (Nowotny, 2016; The Philosopher's Magazine, 2014). It also means that a complex system itself requires a complex system to understand and navigate it – this is known as Ashby's Law of Requisite Variety. Variety is not only requisite, that is mandatory, obligatory and necessary, it also incorporates multiplicity in its widest sense – diversity, plurality, multiculturalism, different perspectives, and inter-, multi- and trans-disciplinarity. All of these have to be present in any endeavor that seeks to understand a complex system – including higher education and knowledge production.

Complexity is not just an important theory. It is the way our world is structured and now functions. If we are to understand change in all its dimensions, including social, political and cultural change, as well as change in educational paradigms, we cannot ignore complexity. And given that life itself has now become complex, and almost all the problems we now face are complex, wicked, problems, it would seem natural that complexity would be central to social sciences and higher education. Why then, ask Colander and Kupers (2014), 'haven't social scientists adopted it already?'. Their answer: 'a major reason is that we have almost no "social scientists"; instead, what we have are economist, sociologists, political scientists, psychologists, and so on, each of whom look at policy within his or her own subfield. The division of social sciences misses the integration that is the basis of complexity' (Colander and Kupers, 2014, p.260). This is not a natural

state; but a product of an academic institutional structure that has fostered separate fiefdoms.

Complexity may not be new paradigm, but it certainly has potential to generate new paradigms. Bates describes it as an 'emerging paradigm'; the assertion, he suggests, is 'based on the substantive body of knowledge which the complexity sciences developed for explaining complex educational dynamics' (Bates, 2016, p.75). If higher education is viewed as an adaptive complex system, suggest Viacava and Pedrozo (2010), and develops the capacity to handle complexity, then it will reinvent itself as a new paradigm. However, by 'ignoring basic complexity principles, educational institutions, whose means and goals inter-retroact with each other, have arrived at an unavoidable position where the serving of noble goals by ignoble means ends by perverting and substituting them by these means'; and all attempts at 'reform have the opposite results' and would further accentuate the crisis in higher education (Konidari, 2011, p.71).

In regard to knowledge and higher education, complexity teaches – indeed, thrusts upon – us, certain insights that we cannot afford to ignore. Complexity tells us that:

1. Our globalized world is interconnected, interdependent and networked; 'the complexity of our challenges arises from the increasing connectedness of the human world' (Page, 2011, p.2). We thus need to pay attention to networks and interactions, to feedback and reiteration: the actions are in the interactions.

2. Change can only be studied meaningfully in a transdisciplinary framework that takes account of the complex diversity of human societies and cultures and diverse disciplines of knowledge. Page (2011) identifies three types of diversities that we need to consider: variations within a type, differences across types, and differences between communities or systems.

3. We cannot have knowledge 'once and for all' but rather that knowledge is 'something we have to actively feel our way around

and through, unendingly. Why unendingly? Because in acting, we create knowledge; and in creating knowledge, we learn to act in different ways; and in acting in different ways, we bring about new knowledge that changes the world, that causes us to act differently, and so on, unendingly' (Osberg et al., 2008, p.213).

4. Knowledge is generated within communities and networks and is thus contextual, inseparable from social, cultural, intellectual and political context, and essentially complex. 'Analogous to self-organising interactions amongst agents in complex adaptive system, people in organisations interact locally, following local self-organising influences such as power, choice, and local patterns of conversation' (Bates, 2016, p.66). The improved performance of an isolated individual, community or a single institution does not have any effect on the overall system. It will only when communities come together in networks that real change emerges.

5. 'Education is premised on a radical re-orientation of enquiry form questions about solutions to educational "crisis" to questions about open-ended, performative nature of knowledge' (Bates, 2016, p.39).

6. 'Learning is not just acquiring skills and information; it is becoming a certain person – a knower in a context where what it means to know is negotiated with respect to the regime of competence of a community' (Wanger, 2008, p.2).

7. Reforms in higher education cannot be reduced to prescriptions, fixed plans and agendas. Complexity explains why agenda and blueprints for reform in higher education 'cannot simply be encoded in policy documents and transmitted' for 'their mechanical implementation'. (Bates, 2016, p.3). New paradigms in higher education may be located in emerging issues as complexity 'views educational change as emergent and sensitive to complex local conditions and the possibility that a small difference in initial

conditions, iterated over time, may lead to unpredicted or undesirable consequences' (Bates, 2016, p.40).

Complexity, then, has the potential to open up new possibilities and take us towards a new paradigm – in the real sense of radically changing dominant sets of beliefs, conventional structures, and modes of knowing, being and doing. But the results cannot be known in advance. By definition, emergence cannot be predicted, and the emergent cannot be predetermined in advance. However, it could lead to new elements and insights and hence to unlimited possibilities. It is as much as changing others and other things as changing our expectations and selves.

Of course, complexity can involve a great deal of analysis of data, mathematical manipulation and formulaic operations (ably demonstrated by Page (2016), Kile and Elliott (1997), Eve at al. (1997) and many others). But complexity is best communicated as narratives. 'To be human', writes Bates,

> is to be concerned with meaning, to desire meaning; and meaning can only be communicated textually – by way of organised narrative or prose. A narrative approach that provides the reader with a vicarious experience may accentuate the meanings and insights emerging form the data. In complexity informed organisational research, narrative-based methodologies offer potential for in-depth understanding of change processes and their intended and unintended consequences, as well as bringing together multiple perspectives of practitioners (Bates, 2016, p.81).

FUTURES AND THE QUESTIONS OF VALUES

Higher education directed towards the future is also about meaning, recognising and enhancing our humanity, and telling stories. Futures studies implicitly works with multiple perspectives as one of its basic assumption is that there is not one but many futures. It incorporates both complexity and transdisciplinarity as its key pillars; and aims at

pluralizing knowledge as well as the very means by which knowledge is produced. As Sardar notes, futures studies

> tackles both the complexity as well as the contradictions inherent in the world; it considers both the global as well as the local dimensions of planning; emphasises both interdependence as well as interconnections; and incorporates plurality as well as participation across all levels of societies and cultures. In as far as futures studies involves systematic and disciplined, empirical and rational exploration of future possibilities, futures studies is a science. But experimentation is not a possibility in futures studies; so, in that sense, futures studies is not a science. In as far as future studies involves foresight, prospective analysis, creation of visions and images, future studies is an art. It is the art of anticipation based on the science of exploration (Sardar, 2006, pp.63-64).

While futures studies have been around since the 1960s, over the last two decades, and particularly after the 2008 economic crisis, it has acquired a sharper focus in the academy and institutions of higher education. Suddenly, it seems everyone is 'discovering' and is 'concerned' about 'the future'. But 'the future' perceived and projected by many could not be further from the aims and objectives of futures studies outlined by Sardar (1999). 'The future' has different meaning for different people. This is obvious from the moniker given to the mode of inquiry that studies and explores 'the future': futurology, futuristic and futurism in the US; and foresight in corporate, business, management, and technocratic circles. In certain corporate and military quarters it is described as 'strategic management'. The accent on these approaches is firmly on 'the future': there is only one future, which can be reasonably predicted, managed and controlled. These approaches present the study of the future as though it was a science that can be studies like other sciences such as physics or biology. As such, they not only ignore complexity but are actually going against the increasing complexity of the world. In Europe and Australia, the terms 'Futures Studies' in preferred to emphasize both the

interdisciplinary nature of the field as well as the plurality of alternative futures. In France and Spain, the designation 'prospective' is used which has the same connotation of plurality and multiplicity. Often 'futures studies' is shortened to 'futures' – as in 'sustainable futures' – which is also the title of the oldest primary journal in field: *Futures – The Journal of Policy, Planning and Futures Studies* (Sardar, 2010). Predictions is sometime used as a substitute for 'the future'. Internationally, futurology is most popular term with the media and writers of airport bestsellers where it is used exclusively for 'predictions about the future'. During the last five years, 'anticipation' has emerged as a synonym for futures. Jasman and McIlveen (2011) provide a topology of the dominant futures terms used in higher education discourse and what they imply in terms of research:

- Forecasting is usually applied within economic contexts, often using statistical approaches to produce a forecast.
- Foresight and strategic foresight aim to increase awareness about the future consequences of current actions, but do not necessarily provide scenarios for the future to help shape possible, preferred or probable outcomes.
- Futures studies and critical futures studies are usually framed within an academic context, offering rigorous and in-depth thought and reflection about the future (Semetsky, 2008). Claims are informed by understandings and theories of societies. Critical futures studies are likely to consider issues of power and agency.
- Sociology of the future is also an academic approach that traces the emergence of dominant ideas about the future, the history of thinking about the future, and our understanding of time (Adams and Groves, 2007). (Jasman and McIlveen, 2011, p.119).

It has to be said that most work on the future is either one-dimensional focus on prediction, or, if it is more sophisticated, geared towards corporate and economic advantage. A good example of the former is provided by the *Times Higher Education*, which asked 'five experts to give their predictions'. The result: the future will be shaped

by augmented reality (AR), virtual platforms, improved sensor technology, 3D printing, and crowdsourcing (Parr, 2014). Another 'Five Bold Predictions for the Future of Higher Education' tell us that academic curricula will become more multidisciplinary, there will be a balance between MOOCS (Massive Open Online Courses) and traditional learning, student recruitment and retention will be more important than ever, higher education institutions will invest in technology, and higher education will explore new funding models (Lukanic, 2014). In an article on 'the digital degree', the *Economist* suggest similar trends (*Economist*, 2014) that will lead to a 'welcome earthquake'. There is, in fact, nothing new or 'bold' about such 'predictions'; they are banal, based on mediocre analysis, and tell little or nothing of value about 'the future'. The exercise amounts to little more than extrapolating the present into the future; this is why such predictions tend overwhelmingly to focus on technology. As a result, all the structures and the values they represent remain intact; the 'crisis' in higher education is accentuated rather than resolved. More scholarly works, tinker around the edges without much knowledge of futures studies or appreciating that futures are full of multiple possibilities. The essays brought together by Olson and Presley in *The Future of Higher Education* (2009), for example, provide an analysis of current problems – such as rethinking access to higher education, re-examining objectives of higher education, the distinction between public and private good – rather than an exploration of futures possibilities. The 22 'leaders in higher education' contribute scholarly, highly theoretical and critique based articles but they are all about the present not alternative futures.

However, genuine futures research based in institutions of higher education can bring dividends – and indeed has. The Finland Futures Research Centre at the University of Turku is a case in point. Established in 1992, as an auxiliary unit of the Turku School of Economics, the Centre has over a hundred faculty with hundreds of masters and doctorate students. Much of the earlier work at the Centre was focussed primarily on economic futures and led to changes in education in Finland. The secondary school education, for example, was radically

transformed: subject orientation was replaced with 4Cs: communication, creativity, critical thinking and collaboration. As a result, education system in Finland came to be seen as one of the best (Wenger, 2008). The Centre's most successful outcome though was the establishment and subsequent rise of Nokia. And its most serious failure? The demise of Nokia: it was bought and subsequently killed by Microsoft. The Centre has now become more multidisciplinary – similar to Arizona State University – and research is now geared towards alternative futures. But the overall emphasis is still on economy and technology: environmental and energy research, food and consumption, bio-economy, and security with a few nods towards educational, social and cultural issues. In some countries, this type of futures work is done by what is usually called 'collaboration' but actually amounts to little more than establishing campuses of western universities and importing expertise from western corporations who often create 'knowledge hubs' to showcase dominant technological trends. Qatar and Dubai provide good examples; and India too seems to be moving in the same direction. As Yeravdekar and Tiwari argue, 'given the massive demand for quality higher education, inviting foreign universities to set up bases here is critical to addressing the supply-side shortfall. Consider that India needs another 800 universities by 2020 to address the educational needs of 45 million students. This demand simply cannot be met by indigenous varsities alone' (Yeravdekar and Tiwari, 2014, p.171). Sometimes, collaboration simply means offering MOOCS through partnerships with corporations. As Butler (2015) notes, 'this partnership is a strange-bedfellows example of how large universities can respond to the challenge of disruptive innovation. ASU is a major public university that has already smelled the coffee – teaming up with Starbucks to offer degrees for the company's employees – while edX is a venture developed by two of America's most prestigious institutions (Harvard and MIT). Expect more unusual partnerships like this in these turbulent times for American higher education'.

Such collaborations are motivated by an unshakable faith in technological futures, which are based on the assumption that the

futures of higher education are a function solely of digital technology and nothing else has any significance. 'In this age when each individual receives a unique education', Yamamoto and Karaman tell us in 'Education 2.0', 'destructive competition will lessen and people will actualise themselves in a much more productive environment. It seems that More's (1516) Utopia and predictions about education could be realised with these technological approaches'. All higher education will be delivered online; and class rooms, 'an epoch consideration and an old trend', will disappear. 'When a person reaches the web wonderland, he or she could be reaching information from a great distance away from a mobile phone or mobile device. This will make campuses classical and nostalgic educational places with people who are willing to go to an indoor classroom'. (Yamamoto and Karaman, 2011, p.116).

One reason for this naïve optimism on technology is that it is the main driving force of change. It is hurling us at great speed towards a well defined, deterministic and technocratic future. This is why the more established futures research centres in universities of Singapore, Taiwan and South Korea are focused on technology; and the newly discovered interest in things futuristic in the universities of the Gulf, particularly Dubai, is fixated on new technology, innovation, and 'cutting-edge knowledge'. But despite the frequent nod to 'critical thinking' there is no questioning of technology itself let alone any meaningful exploration of different futures. The embedded trends of today are simply extrapolated onto the future and it is assumed that this is how things will be: or, as the cover of *Flashes*, 'the monthly magazine on knowledge and development of the Muhammad bin Rashid al Maktoum Foundation', put its, it amounts to 'connecting minds' and 'creating the future'. In fact, the future is not 'created'; rather, it is colonized (Sardar, 1993). Nothing of real significance and meaning changes; except, as Kevin Maney puts in *Newsweek*, the new 'Roman Empire', will suck all the wealth and intellectual talent of the world. 'If you put all the trends together, it seems obvious Silicon Valley will become the most powerful place on earth at the expanse of just about everywhere on earth' (Maney, 2016, p.31).

To focus all futures research on technology is to put the cart before the horse. As Jim Dator, who has spent his entire life studying alternative futures, points out 'it is absolutely essential to determine first what the futures of society generally might be before deciding what the futures of education should be' (Dator, 2014, p.3). In relation to society, there are two factors to consider: what the futures of society *might* be given the current trends; and what the futures of society *ought* to be given our hopes and aspiration. The ought question is, of course, a question of values. We need to navigate away from might to ought; which means we need to have a good grasp of what values we want to project on, and a viable vision of the society we wish to create in, the future. We need a good grasp of both: might and ought. Which means: 'educators need to survey the literature supporting the profoundly different images of the futures before committing to any long-range plan and the policies facilitating it' (Dator, 2014, p.1).

Of course, it is possible that 'might futures' may contain elements that can serve the 'ought futures'. In his survey of 'future-oriented higher education', Rieckmann suggests a number of key components from the education for sustainable development discourse should be fostered in universities. Higher education should be 'competence-oriented': instead of promoting certain behaviors and ways of thinking, it should focus on building capacity to think critically about and beyond what experts say and the ability to test ideas for their futures viability and sustainability. Emphasis should also be placed on exploring contradictions. And higher education should establish 'closer links among environmental quality, human equality, human rights and peace and their underlying political threads' (Rieckmann, 2012, p.129).

Much of European and Australian critical tradition of futures studies has been concerned with these goals. As a transdisciplinary mode of inquiry not rooted in any particular discipline, futures studies has been enriched by the perspectives, concepts, and tools of every academic discipline, emphasizes plurality, diversity and complexity, and is thus ideally suited to be integrated into all aspects of higher education as illustrated by Dator's anthology, *Advancing futures:*

futures studies in higher education (Dator, 2002). Futures' concepts and methodologies, it is argued, are useful tool for teaching multi and transdisciplinary subjects. Scenarios, for example, are an excellent means communicating the notions of sustainability and 'social learning by enabling participants to engage and discuss options for coping with uncertain future' (Tschapka and Kim, 2015). Indeed, a range of pedagogical scenario methods have been developed to enhance critical, overarching, multidisciplinary thinking for complex issues (Fahey and Randall, 1998; Iversen, 2003; Miller, 2007; Barth, 2011); and the OECD now urges that we should 'Think Scenarios, (to) Rethink Education'. The knowledge produced through the process of futures thinking and exploration can be specified in what Semetsky (2010) calls *in vivo* knowledge, that is generated within a living and ongoing process. It is based not just on trends and issues in the external world, but also connected to culture, tradition, the world of human subjectivity, analysis of issues of power and agency, and essentially includes a system of values and meaning that go beyond data and facts. Ideally, meaningful futures thinking and research should aim to reconceptualize higher education as a human moral enterprise that promotes equality, diversity, and social justice.

A NEW AWARENESS

So, what can we say about recent changes, durable trends, critique, counter-critique, and multiple efforts to generate a paradigm shift in the discourse of higher education?

While there is a conspicuous absence of a new, clearly defined paradigm of higher education, a number of themes are clearly evident, presented here as ten points.

1. Higher education is going through a period of uncertainty and crisis driven largely by rapid technological change; but this crisis is also a crisis of aims, values, and epistemology. Universities no longer play their traditional role of advancement, preservation and transmission of knowledge and have instead become businesses

providing service to clients and consumers. Professors and teacher are now akin to operators in factories.

2. Attempts to rethink universities do not amount to much. The rethinking, driven largely by supranational organization such as the World Bank, IMF and OECD, is framed within the prevailing paradigms with emphasis on neoliberal economy. There is a movement towards mergers and international collaboration between universities; and many universities are now opening campuses in the Middle East, India, China and Southeast Asia.

3. Alternatively, we should see universities as moral and intellectual entities independent of political authority and economic power (Alternative white paper, 2011); or as a cooperative enterprise owned collectively by academics, administrators and students (Matthews, 2013); or as a community actively engaged in a conversation within the framework of collective pursuit of knowledge (Skúlason, 2015).

4. The modes of production of knowledge are also changing. There are a number of new theories of knowledge production such as postnormal science and Mode 2 Knowledge. Increasingly, knowledge is being produced in 'extended peer communities' (that include both experts and non-experts), by network of communities, within both local and global contexts, and is 'collective and embodied'. We also need to be aware that a great deal of new knowledge is 'dangerous knowledge' (Facer, 2011); and that 'we cannot measure knowledge' (Moravec, 2015).

5. Our globalized world is becoming more interconnected and complex, and to remain relevant, higher education needs greater awareness of complex and unknowable possibilities. Complexity needs to be integrated at all levels of higher education, including institutional structures; and complexity should be used to rethink educational theory to take us beyond the existing to a new set of concepts.

6. Complex problems and issues cannot be studied, let alone re-solved, from the perspective of a single discipline. We need to move towards multi- and interdisciplinary modes of inquiry and knowledge production. Indeed, we need to go further and embrace transdisciplinarity and human diversity in all its complexity. While disciplinary structures will probably survive in the near future, they are becoming less relevant for a complex, interconnected world. As such, it will become necessary to redesign universities from the ground up on the principles of inter and transdisciplinarity.

7. Complex subjects require complex approaches and are thus best tackled by collaboration between a number of research groups or universities working as a network to realize shared goals. New communication technologies, such as Mediawiki – a web-based technology that allows multiple users to easily and quickly con-tribute to upload, build, and develop content on the web – are often used to promote and support collaborative learning amongst students in higher education institutions (Hadjerrouit, 2012). Research groups located in different parts of the world collaborate to work together on wicked problems using emerging social media technologies both to create knowledge communities and produce new knowledge. But the technology must also be scrutinised.

8. The world is becoming less and less sustainable. It is therefore an urgent necessity for higher education to embrace sustainability. Sustainable education focuses on the basic needs of people all over the world to improve their quality of life without compro-mising the quality of life for future generations.

9. There is an increasing concern about 'the future'; and demand that we should teach the future as we teach the past. But this future is viewed largely through the prism of technological advances and perceived to be deterministic and monolithic. Re-search on the future of higher education and universities shows

'limited critical reflexivity in its own assumptions about the future and offers educators limited support in responding to proliferating contemporary discourses of radical uncertainty' (Facer, 2013). Nevertheless, it has produced some positive results as we witness in the case of Finland and institutions such as Arizona State University and Tamkang University in Taiwan. Sustainable futures, which incorporates complexity, places diversity, values and cultures at the centre of the discourse. *Manifesto 15* uses a famous quote by the science fiction writer, William Gibson, to suggest that 'the future is already here – it's just not very evenly distributed'. Higher education is seriously behind 'most other industries largely from our tendency to look backward, but not forward. We teach the history of literature, for example, but not the future of writing. We teach historically important mathematical concepts, but do not engage in creating new maths needed to build the future'. (Moravec, 2015). It is also argued that futures should be seen not as a strategy but as a value (Sterling, 2012).

10. Given all this, many of our assumptions about the aims of higher education, curriculum development, learning, knowledge production, the function of universities, employment opportunities for graduates, and career paths (including academic careers), though may not necessarily wrong, have now become irrelevant. Over the last two decades, the world has changed quite drastically.

The limitations of the scope of inquiry notwithstanding, this is what I think is the state of the art.

The current impasse in creating new paradigms for higher education also provides us with an opportunity. We can contribute to the emergence of new paradigms as well as play an active part in shaping them. However, this is something that cannot be achieved through a single megaproject, or 'work plans' set in concrete. It requires a reiterative process that constantly adjusts to rapidly changing circumstances. The process has to start in small increments, that act as catalysts, slowly builds up, and eventually gains momentum.

The majority of writers investigating issues of reform in higher education repeatedly urge institutions to pay attention to future challenges and the needs and requirements of the future generation – as can be seen from this survey. The discourse of sustainable futures is particularly focussed on futures. But before one can engage and explore alternative futures in a meaningful way, one needs to be futures literate – that is, have some understanding of how the futures is explored and studied, some familiarity with its methodologies, and an awareness of how the future is forecast and shaped. Futures literacy is vital if an institution of higher learning wants to (a) survive future challenges by adjusting to rapid change, remain relevant, and benefit from emerging opportunities – *a la* Arizona State University; or (b) promote social justice, equality and enhance our humanity as argued by Keri Facer (2011); or (c) create new paradigms that move us away from neoliberalism and the crisis in higher education and usher genuine social, cultural, intellectual and institutional transformations.

Higher education is in turmoil, Ronbald Burnett (1999) points out, because universities find themselves in 'an Age of Supercomplexity': where uncertainty, contestability, contradictions, chaotic behavior and increasing ignorance are the norm. It is rather easy to be overwhelmed by complexity; and unless one has some awareness of the nature of complexity and how networks behave, there is little one can do about it. To harness complexity, 'we need to identify lever points – points in time at which intervention can have large effects' (Scott, 2011). Alternatively, we can say that higher education has gone 'postnormal' (Sardar, 2010; Sardar, 2015; Sardar and Sweeney, 2016; Sardar, 2016) – the norms and conventions of higher education are out of sync with our times and have ceased to function normally.

As critical theory, cultural studies, postcolonial studies and indigenous knowledge studies teaches us, vocabulary is import. The language you use to analyze and synthesize plays a vital role in either entrenching you further in existing paradigms or enhances your efforts for moving towards new paradigms.

To have any meaning and significance, any attempt to reform higher education must take these points into consideration. However,

based on what we have learned from this quite extensive but not completely through and comprehensive literature survey, and what we already know, there are a number of other factors we must also take into account.

There is ample evidence to suggest that science, engineering and medicine degrees in universities across the Muslim world are taught uncritically without any context. What is taught is not science as such but scientism – a blind faith in scientific method. As a result, there is almost no scientific achievement in Muslim societies. It has also been suggested that this exceptionally narrow education is partly responsible for the mind-set of the Jihadis (Rose, 2015; Gambetta and Hertog, 2016). So the current approach to science education is a major problem for Muslim societies. To combat this tendency, we can, for example, develop a programme to promote critical science education in Muslim universities that gives due recognition to context, history and philosophy of science, and liberates the imagination (Haq, 2012). There is a minor revival of the history and philosophy of Muslim science in the West (although, regretfully not in the Muslim world), we can benefit from. 'Philosophy in Arabic', notes John Marenbon,

> in now receiving attention for its own sake as never before, not just among Islamic specialists, but also in philosophy departments, and in some cases from scholars who work on the Latin tradition too. The abbreviated, distorted picture of Arabic philosophy, where it ends just before 1200 with the death of Averroes, the last Arabic thinker who influence Latin philosophy, is now being replaced with one that sees the tradition stretching on to the achievements of thinkers such as Tusi, in the thirteenth century, and Mulla Sadra in the seventeenth. Areas of Arabic thought which were unknown to Latin Middle Ages, such as al-Farabi's philosophy of language, or Avicenna's model logic are being investigated' (Marenbon, 2016, p.78)

We can ride on this small wave. Produce innovate curriculums that provides social and cultural context, and integrates new discoveries in the history and philosophy of science, in science education. A project

that promotes a more balanced science education across the Muslim world would have tremendous advantage.

We can go further and encourage universities in the Muslim world to collaborate with each other, and with western universities, to produce networks of researchers and scholars who work on local problems within local contexts and internationally on problems shared by Muslim societies and other communities everywhere. The common and obvious problems of science education described by Muslim World Science Initiative in *Science at the Universities of the Muslim World* (2015), for example, cannot be solved by individual universities in isolation. They require collaborative effort and sharing of material and intellectual resources. IIIT has excellent relations with a number of American and Turkish universities, which can serve as a platform for initiating and building this network. In Europe, the Universities in the Knowledge Economy (UNIKE) project provides us with a useful model. The four-year collaborative project funds 12 doctoral fellows and three post-doctoral fellows at six European universities to work collectively on enhancing the relationship between universities and knowledge economies in Europe and Asia-Pacific Rim. While the research may be conventional, the collaborative model is new and original. According to its website, the aim of the 'UNIKE project is both training a networked group of critical researchers to be future research leaders, as well as producing original research regarding the changing roles and scope of universities in emerging global knowledge economies' (UNIKE, 2016). Muslim organizations can promote the creation of similar network of doctoral and postdoctoral fellows in western and Muslim universities that works on specific problems of Muslim societies, including more appropriate science education, embedding philosophy in Muslim universities, and inaugurating liberal studies in institutions of higher education.

Given their increasing importance, and the fact that new knowledge is generated largely through networks – Manifest 15 puts it: 'the network is the learning' – we need to promote and create as many scholarly and institutional networks as we can. Indeed, it can be argued that we need a Network University that specifically focuses

on the current and emerging problems of Muslim societies – similar to the proposed BRICS Network University. The idea is to create a diverse network of scholars and researchers, working in different universities, that focuses on such problems as energy, ecology and climate change, water resources, pollution treatment, and international relations specifically from the viewpoint of BRICS (Brazil, Russia, India, China, and South Africa) countries (O'Malley, 2016). While the project has been criticized because it is Russian led, it does suggest a way forward.

As new knowledge is produced in communities through vigorous conversation, we ought to create a whole range of scholarly communities exploring different facets of reform and paradigm shifts. Groups of scholars, academics, and thinkers should be brought together on a regular basis to engage in polylogues. The members of these communities have to come from a number of different disciplines. No new knowledge will be produced, for example, if we simply bring a group of traditional scholars together. They will all agree with each other, conclude that the *ulama* have solved all problems for eternity, and disperse with a beatific smile on their faces. A polylogue involves multiple and often contradictory perspectives where participants' positions and assumptions are challenged and interrogated from different viewpoints, and a synthesis emerges through contestation as well as appreciation of dissimilar outlooks. They constitute Fleming's 'tiny revolutions' that gradually make dents and cracks in the edifice of the dominant paradigms (Fleming, 2013).

If knowledge is best produced in the context of application and according to specific needs, then we ought to be looking at our own context and specificity. Or, to put it another way, we ought to be creating pluralistic disciplines that emerge from our own concerns. Consider as an example one of the biggest concerns for Muslims and Islam in contemporary times: Islamophobia, which has both extended and replaced the old scholarly discourse of Orientalism. Unlike Orientalism, which was located in scholarly and literary output, Islamophobia is everywhere – in politics, film, television shows, theatre, news media, blogs, and even embedded within institutions. It is interesting

to note that it is now emerging as a field of study in its own right: books and papers on Islamophobia are proliferating, it is being taught in university departments, and there is an annual *European Islamophobia Report* (Bayrakli and Hafez, 2015), which provides a survey of Islamophobic tendencies of 25 European states. But Islamophobia is a segment of a much larger issues: the proliferation of different varieties of ignorance. In postnormal times, where knowledge is contested and facts are in dispute, ignorance is often deliberately spread. We are not talking about old fashioned propaganda or advertising. Rather, think of how the tobacco industry deliberately spread confusion about whether smoking causes cancer by producing its own contrary research, by funding research at reputable institutions, and through their powerful lobbies. Ditto for oil companies and climate change; the oil companies even established and funded think tanks to produce research that denied the reality of global warming. Exactly the same thing is now happening with regard to genetic engineering, other scientific breakthroughs and technological developments, as well as the areas of economy and finance. But ignorance is not just a function of deliberate misinformation; it has other dimensions too. We are ignorant of issues for which there are no answers in the present; they can only be discovered in the future. To assume that there is a 'right answer' in a complex situation where there are not right and wrong answers is itself a form of ignorance. Our assumptions and axioms also lead us to ignorance of 'unknown unknowns' – things we do not know that we do not know but ought to know. So ignorance, like most things in contemporary times, is complex phenomena that has to be studied on its own right. Hence we have the emerging, interdisciplinary field of ignorance studies, also known as Agnotology (Proctor and Schiebinger, 2008; Firestein, 2012; Gross and McGoey, 2016). We need to develop the capability of identifying such emerging fields as well as create fields suited to our own contexts. Perhaps we can establish a transdisciplinary center, which brings scholars from a whole range of fields – social sciences, arts and humanities, liberal studies, natural sciences, as well as traditional scholars – devoted to exploring contextual knowledge and shaping new, tailor-made fields

of inquiry. It could be located in a physical space, or it could be a dynamic and engaging network, or both; but it will need the ability to spot emerging issues and constantly critique and challenge ideas in a reiterative on-going process.

Then there is the vexing question of emerging technologies. Undoubtedly, the biggest challenge to institutions of higher learning comes from new and emergent technologies that always have good and bad sides and involve complex moral and ethical, administrative and financial, knowledge and research, issues and choices. These technologies cannot be ignored. In order to thrive and not just survive, universities of the future must have the capability to spot key emerging issues and accelerating trends; and make prudent choices and invest resources accordingly. But how does one make the appropriate choices in issues of complex, emerging technologies? Consider, for example, one of the newest technologies sparking widespread interest and substantial investment: blockchain, the structure underlying cryptocurrencies such as Bitcoin and Ethereum. Blockchain works by creating 'blocks' of code for every transaction on its proprietary platform – from clicking on a link to sending money. All transactions are hosted by a network of peers, which creates an open and distributed ledger. Data blocks, then, serve as public records and are stored in a chain that cannot be altered without creating a new transaction. For some, blockchain is merely a new database system that enhances transparency and security by decentralizing all data and transactions amongst a network; for others, blockchain provides an opportunity to rethink information sharing as we know it and wrestle control back from the corporate powers that dominate the global communication technology and finance markets through new Internet interfaces (Allison, 2016) and banking platforms (Van de Sande, 2015; Tapscott and Tapscott, 2016). Whether one thinks that blockchain will usher in a new era or simply extend the present, the technology itself is important and demands our attention. Indeed, it has already received a great deal of notice. The multinational consulting firm, Deloitte, for example, talks of a 'new gold rush', and notes that global investment in this nascent technology has increased exponentially in the past few years (Deloitte

Australia, 2016). Major international banks and finance companies have invested in blockchain startups and are working toward building internal capacities for this technology. Governments and civil society organizations too seek to position themselves as leaders in this area. In February 2016, the government of Dubai established The Global Blockchain Council as part of its Museum of the Future Foundation (Prisco, 2016). In early 2016, the International Committee of the Red Cross began a pilot project using a blockchain-based cryptocurrency in Bangladesh. At about the same time, Humanitarian Blockchain, a UK based startup, started working to 'to address and solve complex global problems like racism and unemployment in African-American communities, drug cartel involvement in Latin American real estate markets, and the child sex trade in South East Asia' (Scott, 2016).

Given its nature, a host of social, cultural, economic and ethical questions arise from the emergence of blockchain technology; and, as it is usual with any new technology, its future is quickly being colonized. Given all of the interest and hype, not to say the issues of ignorance, about blockchain, what can and might universities do now? What inter- and transdisciplinary programmes of study might universities develop around blockchain? Given the speed of development and investment, how might universities work with the private and public sectors to produce new knowledge on blockchain? How can blockchain be used in university settings to advance transparency and information sharing? Could emphasizing blockchain draw resources away from other equally important programmes? If blockchain is utilized for university administration and operations, what impact will this technology have its impact financial and accounting practices (Long, 2016)? What aspects of blockchain pair well with the university's existing programmes and areas of strength? What university partners might already have connections to the global blockchain community? What new partnerships can and might be built around blockchain technologies? There are also questions specific to Muslim context. Will blockchain become another technological instrument to undermine economic development in the Muslim world? Will many

Muslim countries be able to use this technology to its full potential given existing barriers to Internet technologies in the global South? Will the education systems in Muslim universities have to capacity to produce the required manpower with adequate skills? These, and other similar questions, cannot be answered without through research and without producing new knowledge on blockchains. They would require an interdisciplinary mode of inquiry focussed on blockchain that will have to take the changes in the technology itself into account. So a whole discourse could, or indeed should, emerge around blockchain. There are numerous other emerging technologies from AI (artificial intelligence), genetic engineering, brain-computer interface, implanted electronics, nanotechnologies to quantum computing – all of which demand their own particular inter- and transdisciplinary inquiries and discourses. All will have a profound impact on the future of higher education. There are risks associated with each that must be carefully scrutinized and analyzed. And yet, there is no coherent interdisciplinary field of study that focuses on these vital questions. There is an urgent case here for bringing western and Muslim universities together to work in collaboration and produce knowledge that enables choices to be made with wisdom – beyond cleverness and ideological thinking.

The map is not the territory. There are innovative discourses, new transdisciplinary modes of inquiry, fresh understanding of how new knowledge is produced in a complex, uncertain, networked, globalized world, and not-so-emerging paradigms in a state of gestation. But the terrain of reform in higher education and shaping of new paradigms is wide open. Only a few next steps are outlined here; they can be explored further, extended and turned into a full blown, dynamic, iterative plan of actions. However, they do suggest that we have a golden opportunity to play an important part in plotting a viable path through an increasingly chaotic emerging landscape.

The future beckons.

REFERENCES

Abeles, Tom P. 2001. "Rethinking the University". *Foresight* 3 (6): pp.563-68. doi:10.1108/14636680110420486.

ACT Foundation & Institute for the Future. 2016. "Learning Is Earning 2026". http://www.learningisearning2026.org/.

"Acting in Uncertainty". 2014. *The Philosopher's Magazine*, pp.77-106.

Alhadeff-Jones, Michel. 2008. "Three Generations of Complexity Theories: Nuances and Ambiguities". In *Complexity Theory and the Philosophy of Education*, edited by Mark Mason, 1st edition, pp.62-78. Chichester, West Sussex, UK; Malden, MA: Wiley-Blackwell.

Allen, Mark. 2002. *The Corporate University Handbook: Designing, Managing, and Growing a Successful Program*. New York, NY: AMACOM.

Allison, Ian. 2016. "Ethereum's Viktor Trón Talks about Swarm and the Skeleton of Web 3.0". *International Business Times UK*. May 18th. http://www.ibtimes.co.uk/ethereums-viktor-tron-talks-about-swarm-skeleton-web-3-0-1560654.

"Alternative White Paper: In Defence of Public Higher Education". 2011. *The Guardian*. September 27th. http://www.theguardian.com/education/interactive/2011/sep/27/higher-education-alternative-white-paper.

Alvesson, Mats, Todd Bridgman, and Hugh Willmott, eds. 2011. *The Oxford Handbook of Critical Management Studies*. Reprinted. Oxford: Oxford Univ. Press.

Apple, Michael W. 2003. *The State and the Politics of Knowledge*. New York; London: Routledge.

———. 2006. "Markets and Measurement: Audit Cultures, Commodification, and Class Strategies in Education". *The Journal of Educational Sociology* 78 (0): pp.373-98. doi:10.1151/edsi951.78.373.

Asad, Talal, ed. 1995. *Anthropology & the Colonial Encounter*. Humanity Books.

"At ASU, One Is the Loveliest Number". 2016. *ASU Now: Access, Excellence, Impact*. May 11th. https://asunow.asu.edu/20160511-asu-news-asu-one-loveliest-number.

Barnett, Ronald. 1999. *Realizing the University in an Age of Supercomplexity*. 1st edition. Buckingham; Philadelphia, PA: Open Univ Press.

Baronian, Marie-Aude, and Mireille Rosello. 2008. "Jacques Rancière and Indisciplinarity". Translated by Gregory Elliot. *Arts and Research: A Journal of Ideas, Contexts, and Methods* 2 (1). http://www.artandresearch.org.uk/v2n1/jrinterview.html.

Barth, Matthias, Gerd Michelsen, Marco Rieckmann, and Ian Thomas, eds. 2015. *Routledge Handbook of Higher Education for Sustainable Development*. London; New York, NY: Routledge.

Berman, Sheri. 2016. "The Promise of the Arab Spring". *Foreign Affairs*. March 2nd. https://www.foreignaffairs.com/articles/syria/2012-12-03/promise-arab-spring.

Bernstein, Jay Hillel. 2015. "Transdisciplinarity: A Review of Its Origins, Development, and Current Issues". *Journal of Research Practice* 1 (1): 1.

Beynaghi, A., F. Moztarzadeh, R. Maknoon, T. Waas, M. Mozafari, J. Hugé, and W. Leal Filho. 2014. "Towards an Orientation of Higher Education in the Post Rio+20 Process: How Is the Game Changing?" *Futures* 63 (November): pp.49-67. doi:10.1016/j.futures.2014.08.004.

Blank, Chancellor. 2015. "Update on Budget Reductions | Office of the Chancellor". April 17th. https://chancellor.wisc.edu/blog/update-on-budget-reductions/.

Bocchi, Gianluca, Eloisa Cianci, Alfonso Montuori, Raffaella Trigona, and Oscar Nicolaus. 2014. "Educating for Creativity". *World Futures* 70 (5-6): pp.336-69. doi:10.1080/02604027.2014.977084.

Bourdieu, Pierre. 1988. *Homo Academicus*. Stanford, Calif.: Stanford University Press.

Bray, Nathaniel J., and Claire H. Major. 2011. "Status of Journals in the Field of Higher Education". *The Journal of Higher Education* 82 (4): pp.479-503. doi:10.1353/jhe.2011.0020.

Brundtland, Gro Harlem. 1987. "Our Common Future: Report of the World Commission on Environment and Development". United Nations. http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf.

Buendia, Augustin, and Carolina Morales. 2003. "A New Educational Paradigm for Evolving Development". *World Futures* 59 (8): pp.561-68. doi:10.1080/713747093.

Butler, Stuart M. 2015. "New Arizona State-edX MOOC: Another Blow to Traditional College". *The Brookings Institution*. May 4th. http://www.brookings.edu/blogs/techtank/posts/2015/05/4-asu-moocs-butler.

Chege, Mwangi. 2009. "The Politics of Education in Kenyan Universities: A Call for a Paradigm Shift". *African Studies Review* 52 (03): pp.55-71. doi:10.1353/arw.0.0231.

Cheng, Yin Cheong. 2000. "A CMI triplization Paradigm for Reforming Education in the New Millennium". *International Journal of Educational Management* 14 (4): pp.156-74. doi:10.1108/09513540010371975.

———. 2005. *New Paradigm for Re-Engineering Education: Globalization, Localization and Individualization*. Education in the Asia-Pacific Region, v. 6. Dordrecht: Springer.

Churchill, Ward. 2001. *Fantasies of the Master Race: Literature, Cinema, and the Colonization of American Indians*. San Francisco: City Lights Publishers.

———. 2002a. *White Studies: The Intellectual Imperialism of Higher Education*. Edited by Yusef Progler. 1st edition. Citizens International, 10350 Penanag, Malayasia.

———. 2002b. *Acts of Rebellion: The Ward Churchill Reader*. New York: Routledge.

Cohen, Audrey. 1993. "A New Educational Paradigm". *The Phi Theta Kappan* 74 (10).

Colander, David C., and Roland Kupers. 2014. *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom up*. Princeton: Princeton University Press.

Colvile, Robert. 2016. *The Great Acceleration: How the World Is*

Getting Faster, Faster. Bloomsbury Publishing.

Conway, Maree. 2012. "Sustainable Futures: What Higher Education Has to Offer". *Social Alternatives* 31 (4): pp.35-40.

Crow, Michael M., and William B. Dabars. 2015. *Designing the New American University*. Baltimore, Maryland: Johns Hopkins University Press.

Cupitt, Don. 2012. *Crisis of Moral Authority*. New edition. SCM Press.

Curaj, Adrian, Luke Georghiou, Jennifer Cassingena Harper, and Eva Egron-Polak, eds. 2015. *Mergers and Alliances in Higher Education*. Switzerland: Springer International Publishing. http://www.springer.com/gb/book/9783319131344.

Darbellay, Frédéric. 2015. "Rethinking Inter- and Transdisciplinarity: Undisciplined Knowledge and the Emergence of a New Thought Style". *Futures* 65 (January): pp.163-74. doi:10.1016/j.futures.2014.10.009.

Dator, James A., ed. 2002. *Advancing Futures: Futures Studies in Higher Education*. Praeger Studies on the 21st Century. Westport, Conn: Praeger.

———. 2014. "Highlight: Technology That Shapes a Future of Education". *"ICT in Education Announcement" E-Newsletter – UNESCO Bangkok*, February.

Dator, Jim, Ray Yeh, and Seongwon Park. 2013. "Campuses 2060: Four Futures of Higher Education in Four Alternative Futures of Society". In *Developments in Higher Education: National Strategies and Global Perspectives*, edited by Munir Shuib, Aida Suraya Md. Yunus, and Shukran Abd. Rahman, pp.116-62. Academic Imprint Series / Penerbit USM. [Glugor], Pulau Pinang: Institut Penyelidikan Pendidikan Tinggi Negara: Penerbit Universiti Sains Malaysia.

Dei, George J. Sefa, ed. 2011. *Indigenous Philosophies and Critical Education: A Reader*. 1st printing edition. New York: Peter Lang Publishing Inc.

Deloitte Australia. 2016. "Bitcoin, Blockchain and Distributed Ledgers | Deloitte Australia | Technology Consulting Services and Reports".

Deloitte Australia. http://www2.deloitte.com/au/en/pages/tech nology/articles/distributed-ledgers.html.

Deresiewicz, William. 2015. "The Neoliberal Arts". *Harper's Magazine,* September. http://harpers.org/archive/2015/09/the-neoliberal-arts/.

Desha, Cheryl, and Karlson Hargroves. 2014. *Higher Education and Sustainable Development: A Model for Curriculum Renewal.* 1st edition. London; New York: Routledge, Taylor & Francis Group.

De Souza, Hector Gurgulino, Garry Jacobs, Winston Nagan, Ivo Šlaus, and Alberto Zucconi. 2013. "A Revolution and a New Paradigm in Education". *Cadmus Journal* 2 (1). http://cadmus journal.org.

Dowton, S. Bruce. 2013. "Our University: A Framing of Futures". *Macquarie University.* http://www.mq.edu.au/our-university/.

Eggins, Heather, ed. 2003. *Globalization and Reform in Higher Education.* Maidenhead, Berkshire, UK: Open University Press.

Enders, Jürgen, and Oliver Fulton, eds. 2002. *Higher Education in a Globalising World: International Trends and Mutual Observations: A Festschrift in Honour of Ulrich Teichler.* Dordrecht; Boston: Kluwer Academic Publishers.

English, Fenwick W., and Lisa Catherine Ehrich. 2015. "Innovatus Interregnum: Waiting for a Paradigm Shift". Edited by Jeffrey S. Brooks and Anthony H. Normore. *International Journal of Educational Management* 29 (7): pp.851-62. doi:10.1108/IJEM-05-2015-0055.

Ernst & Young. 2012. "University of the Future". http://www.ey.com/Publication/vwLUAssets/University_of_the_future/$FILE/University_of_the_future_2012.pdf.

Eve, Raymond A., Sara T. Horsfall, and Mary Lee, eds. 1997. *Chaos, Complexity, and Sociology: Myths, Models, and Theories.* Thousand Oaks, Calif: SAGE Publications, Inc.

Facer, Keri. 2011. *Learning Futures: Education, Technology, and Social Change.* 1st edition, London; New York: Routledge.

Facilitating Interdisciplinary Research. 2004. Washington, DC: National Academies Press. http://www.nap.edu/catalog/11153.

Firth, Lisa. 2012. *A Sustainable Future*. Cambridge: Independence.

Fitz, Nicholas. 2015. "Economic Inequality: It's Far Worse Than You Think". *Scientific American*. March 31st. http://www.scientificamerican.com/article/economic-inequality-it-s-far-worse-than-you-think/.

Flaherty, Colleen. 2014. "Faculty Members at Upper Iowa U. Say They Lost Jobs for Questioning Curricular Changes". July 22nd. https://www.insidehighered.com/news/2014/07/22/faculty-members-upper-iowa-u-say-they-lost-jobs-questioning-curricular-changes.

Flashes (2016), 'Decade of Vision' (Dubai: Qindeel) February

Fleming, Rob. 2013. *Design Education for a Sustainable Future*. London; New York: Routledge.

Fournier, Valérie, and Warren Smith. 2012. "Making Choice, Taking Risk: On the Coming out of Critical Management Studies | Ephemera". *Ephemera: Theory & Politics in Organization* 12 (4): pp.463-74.

Freedom House. 2016. "Freedom in the World 2016". Freedom House. https://freedomhouse.org/sites/default/files/FH_FITW_Report_2016.pdf.

Freeman, Oliver, Richard Watson, and Teaching Australia- Australian Institute for Teaching and School Leadership. 2008. *Teaching for Uncertain Futures: The Open Book Scenarios: A Project Exploring Possible Futures for Teaching*. Canberra: Teaching Australia.

Frodeman, Robert. 2014. *Sustainable Knowledge: A Theory of Interdisciplinarity*. Palgrave Pivot. Houndmills, Basingstoke, Hampshire; New York, NY: Palgrave Macmillan.

Fullan, Michael G., and Suzanne Stiegelbauer. 1992. *The New Meaning of Educational Change*. 2nd edition. Toronto: OISE Press [u.a.].

Funtowicz, Silvio O., and Jerome R. Ravetz. 1993. "Science for the Post-Normal Age". *Futures* 25 (7): pp.739-55.

Gage, N. L. 1989. "The Paradigm Wars and Their Aftermath: A 'Historical' Sketch of Research on Teaching since 1989". *Educational Researcher* 18 (7).

Gibbons, Michael. 1994. *The New Production of Knowledge: The*

Dynamics of Science and Research in Contemporary Societies. London; Thousand Oaks, Calif: SAGE Publications Ltd.

———. 1998. "Higher Education Relevance in the 21st Century". UNESCO. http://portal.unesco.org/education/en/files/9619/10376 170210CommissionI-E.pdf/CommissionI-E.pdf.

Gilbert, Michael. 2013. "A Plea for Systemic Change in Education". *On the Horizon* 21 (4): pp.312-22. doi:10.1108/OTH-12-2012-0041.

Godet, Michel. 1988. "Worldwide Challenges and Crises in Education Systems". *Futures* 20 (3): pp.241-51. doi:10.1016/0016-3287(88) 90080-8.

Gough, Stephen, and William Scott, eds. 2009. *Higher Education and Sustainable Development Paradox and Possibility.* New York, NY: Routledge.

Grey, Christopher, and Hugh Willmott, eds. 2005. *Critical Management Studies: A Reader.* Oxford Management Readers. Oxford: Oxford University Press.

Guston, Dave. 2016. "School for the Future of Innovation in Society". *ASU.* Accessed June 17th. https://sfis.asu.edu/about/directors-welcome.

Hadjerrouit, Said. 2012. "Wiki-Based Collaborative Learning in Higher Education: A Pedagogical Evaluation". *International Journal of Innovation and Learning* 12 (1): 6. doi:10.1504/IJIL.2012.047307.

Haq, Syed Nomanul. 2012. "Across Sementic Turfs: The Need for Broader Education". In *Urolithiasis: Basic Science and Clinical Practice*, edited by J. J. Talati. Dordrecht: Springer.

Harbour, Clifford P., and Jennifer R. Wolgemuth. 2013. "Giorgio Agamben and the Abandonment Paradigm: A New Form of Student Diversion in Public Higher Education". *The Review of Higher Education* 36 (2): pp.235-54. doi:10.1353/rhe.2013.0004.

Hargreaves, Andy. 2003. *Teaching in the Knowledge Society: Education in the Age of Insecurity.* New York: Teachers College Press.

Harindranath, Ramaswami. 2014. "The View from the Global South: An Introduction". *Postcolonial Studies* 17 (2): pp.109-14. doi:10. 1080/13688790.2014.966412.

Harvey, David L., and Michael Reed. 1997. "Social Science as the Study of Complex Systems". In *Chaos Theory in the Social Sciences: Foundations and Applications*, edited by L. Douglas Kiel and Euel W. Elliott, Revised edition. University of Michigan Press.

Hayes, Dianne. 2012. "Higher Education and Financial Literacy – A New Paradigm". *Diverse: Issues in Higher Education* 29 (5): pp. 8-9.

Hemsley-Brown, Jane. 2011. "Market Heal Thyself: The Challenges of a Free Market in Higher Education". *Journal of Marketing for Higher Education* 21 (2): pp.115-32. doi:10.1080/08841241. 2011.623832.

Inayatullah, Sohail. 2008a. "Images and Trends in Tension: The Alternative Futures of the University". In *Alternative Educational Futures: Pedagogies for Emergent Worlds*, edited by Sohail Inayatullah, Marcus Bussey, and Ivana Milojevic, pp.113-32. Rotterdam: Sense Publishers.

———. 2008b. "Mapping Educational Futures: Six Foundational Concepts and the Six Pillars Approach". In *Alternative Educational Futures: Pedagogies for Emergent Worlds*, edited by Sohail Inayatullah, Marcus Bussey, and Ivana Milojevic, pp.13-40. Rotterdam: Sense Publishers.

Ingold, Timothy. 2016. "Reclaiming the University of Aberdeen". *Council for the Defence of British Universities*. June 18th. http:// cdbu.org.uk/reclaiming-the-university-of-aberdeen/.

Iversen, Jonas Svava. 2006. "Futures Thinking Methodologies and Options for Education – OECD". *OECD*. https://www.oecd.org/ site/schoolingfortomorrowknowledgebase/futuresthinking/scenario s/futuresthinkingmethodologiesandoptionsforeducation.htm.

Jacobs, Garry. 2015. "Overcoming the Educational Time Warp: Anticipating a Different Future". *Cadmus Journal: New Perspectives on Major Global Issues* 2 (5): pp.1-15.

Jacobs, Jerry A., and Scott Frickel. 2009. "Interdisciplinarity: A Critical Assessment". *Annual Review of Sociology* 35: pp.43-65.

Jarvis, Peter. 2001. *Universities and Corporate Universities: The Higher Learning Industry in Global Society*. London: Kogan Page.

Jasman, Anne, and Peter McIlveen. 2011. "Educating for the Future and Complexity". *On the Horizon* 19 (2): pp.118-26. doi:10.1108/10748121111138317.

Jensenius, Alexander Refsum. 2012. "Disciplinarities: Intra, Cross, Multi, Inter, Trans". *ARJ.* March 12th. http://www.arj.no/2012/03/12/disciplinarities-2/.

Johnson, R. Burke, and Anthony J. Onwuegbuzie. 2004. "Mixed Methods Research: A Research Paradigm Whose Time Has Come". *Educational Researcher* 33 (7): pp.14-26.

Kauffman, Stuart A. 1993. *The Origins of Order: Self-Organization and Selection in Evolution.* 1st edition. New York: Oxford University Press, USA.

Keating, Michael, and David McCrone. 2013. *The Crisis of Social Democracy in Europe.* Edinburgh: Edinburgh University Press.

Keirl, Steve. 2015. "Against NeoLiberalism: For Sustainable-Democratic Curriculum Through Design and Technology Education". In *Environment, Ethics and Cultures: Design and Technology Education's Contribution to Sustainable Global Futures,* edited by Kay Stables and Steve Keirl. London: Sense Publishers.

Kellert, Stephen H. 1994. *In the Wake of Chaos: Unpredictable Order in Dynamical Systems.* New edition. Chicago: University Of Chicago Press.

Kelly, Nick. 2014. "Corporate Highs: The US P-TECH Model for Schools in Australia?" *The Conversation.* June 16th. http://theconversation.com/corporate-highs-the-us-p-tech-model-for-schools-in-australia-27912.

Kempen, Elizabeth. 2014. "Special Issue on Sustainable Futures: Editorial". *International Journal of Consumer Studies* 38 (5): p.443. doi:10.1111/ijcs.12132.

Kezar, Adrianna. 2014. "Higher Education Change and Social Networks: A Review of Research". *The Journal of Higher Education* 85 (1): pp.91-125. doi:10.1353/jhe.2014.0003.

Kiel, L. Douglas, and Euel W. Elliott, eds. 1997. *Chaos Theory in the Social Sciences: Foundations and Applications.* Revised edition. University of Michigan Press.

Klein, Julie Thompson. 1993. *Interdisciplinarity: History, Theory, and Practice*. 3rd printing. Detroit: Wayne State Univ. Press.

———. 2014. "Discourses of Transdisciplinarity: Looking Back to the Future". *Futures* 63 (November): pp.68-74. doi:10.1016/j.futures.2014.08.008.

Konidari, Victoria. 2011. "Education in a Complex World: A Political Question to Be Answered". *On the Horizon* 19 (2): pp.75-84. doi:10.1108/10748121111138272.

Lewin, Roger. 2000. *Complexity: Life at the Edge of Chaos*. 2nd edition. Chicago, Ill: University of Chicago Press.

Lewin, Tamar. 2008. "With No Frills or Tuition, a College Draws Notice". *The New York Times*, July 21st. http://www.nytimes.com/2008/07/21/education/21endowments.html.

Lewis, Harry. 2007. *Excellence Without a Soul: Does Liberal Education Have a Future?* 1st edition. New York: PublicAffairs.

Li, Y.-T. 2015. "Constituting Co-Ethnic Exploitation: The Economic and Cultural Meanings of Cash-in-Hand Jobs for Ethnic Chinese Migrants in Australia". *Critical Sociology*, September. doi:10.1177/0896920515606504.

Long, Caitlin. 2016. "Why Financial Regulators Are Warming to Blockchains – And Rightfully So". *Alt-M*. April 26th. http://www.alt-m.org/2016/04/26/why-financial-regulators-are-warming-to-blockchains-and-rightfully-so/.

Lukanic, Brad. 2014. "5 Bold Predictions For The Future Of Higher Education". *Co.Exist*. April 23rd. http://www.fastcoexist.com/3029109/futurist-forum/5-bold-predictions-for-the-future-of-higher-education.

Macfarlane, Bruce. 2012. *Intellectual Leadership in Higher Education: Renewing the Role of the University Professor*. Research into Higher Education. New York: Routledge.

Maney, Kevin. 2016. "Why the World Loves Silicon Valley...and Fears It". *Newsweek*, June 17th.

Manicas, Peter. 1998. "The Radical Restructing of Higher Education". *Futures* 30 (7): pp.651-56.

Marenbon, John, The Philosophers' Magazine. 2016. "New ideas in

history:" *The Philosophers' Magazine*, no. 72: pp.77-78. doi:10.5840/tpm20167240.

Masini, Eleonora Barbieri. 2013. "Intergenerational Responsibility and Education for the Future". *Futures* 45 (January): S32-37. doi:10.1016/j.futures.2012.11.005.

Mason, Mark, ed. 2008. *Complexity Theory and the Philosophy of Education*. 1st edition. Chichester, West Sussex, UK; Malden, MA: Wiley-Blackwell.

Matthews, David. 2013. "Inside a Cooperative University". *Times Higher Education (THE)*. August 29th. https://www.timeshigher education.com/features/inside-a-cooperative-university/2006776. article.

McKenna, Laura. 2015. "The Unfortunate Fate of Sweet Briar's Professors". *The Atlantic*, March 10th. http://www.theatlantic.com/education/archive/2015/03/the-unfortunate-fate-of-sweet-briars-professors/387376/.

Medovoi, Leerom. 2010. "A Contribution to the Critique of Political Ecology: Sustainability as Disavowal". *New Formations* 69 (1): pp.129-43. doi:10.3898/NEWF.69.07.2010.

Mehrotra, Santosh. 2005. "Human Capital or Human Development? Search for a Knowledge Paradigm for Education and Development". *Economic and Political Weekly* 40 (4): pp.300-306.

Miller, Riel. 2007. "Futures Literacy: A Hybrid Strategic Scenario Method". *Futures* 39 (4): pp.341-62. doi:10.1016/j.futures.2006.12.001.

Milman, Oliver. 2015. "Rate of Environmental Degradation Puts Life on Earth at Risk, Say Scientists". *The Guardian*, January 15th, sec. Environment. https://www.theguardian.com/environment/2015/jan/15/rate-of-environmental-degradation-puts-life-on-earth-at-risk-say-scientists.

Moeller, Joergen Oerstroem. 2015. "A New Dark Age?" *The Huffington Post*. May 16th. http://www.huffingtonpost.com/joergen-oerstroem-moeller/a-new-dark-age_b_6867118.html.

Mogollon, Mery, and Chris Kraus. 2015. "In Venezuela, Students and Faculty Caught in Budget-Driven University Closures".

Latimes.com. November 17th. http://www.latimes.com/world/mexico-americas/la-fg-venezuela-professors-20151117-story.html.

Mojab, Shahrzad. 1998. "The State, University, and the Construction of Civil Society in the Middle East". *Futures* 30 (7): pp.657-67. doi:10.1016/S0016-3287(98)00073-1.

Moravec, John. 2015. "Manifesto 15". *Manifesto 15*. January 1st. http://www.manifesto15.org/en.

Moravec, John W. 2008. "A New Paradigm of Knowledge Production in Higher Education". *On the Horizon* 16 (3): pp.123-36. doi:10.1108/10748120810901422.

———. 2013. "Knowmad Society: The 'new' Work and Education". Edited by John Moravec. *On the Horizon* 21 (2): pp.79-83. doi:10.1108/10748121311322978.

Morrison, Keith. 2008. "Educational Philosophy and the Challenge of Complexity Theory". In *Complexity Theory and the Philosophy of Education*, edited by Mark Mason, 1st edition, pp.16-31. Chichester, West Sussex, UK; Malden, MA: Wiley-Blackwell.

Muecke, Stephen. 2016. "'I Am What I Am Attached to': On Bruno Latour's 'Inquiry into the Modes of Existence'". *Los Angeles Review of Books*. Accessed June 22nd. https://lareviewofbooks.org/article/i-am-what-i-am-attached-to-on-bruno-latours-inquiry-into-the-modes-of-existence/.

Muslim World Science Initiative,. 2015. "Report of Zakri Task Force on Science at Universities of the Muslim World". London.

Muslim World Science Initiative. 2015. "Report of Zakri Task Force on Science at Universities of the Muslim World". London and Istanbul. http://comstech.org/docs/Science_at_Universities_of_the_Muslim_World.pdf.

Nelson, Ruben. 2006. "Whither Democracy?: Reflections on the Prospects of Democracy in the 21st Century". Foresight Canada / Creating Tomorrow Foundation. http://foresightcanada.com/wp-content/uploads/2015/09/Whither-Democracy-Reflections...-R.-Nelson-2006.pdf.

Newman, Bl. John Henry. 2014. *The Idea of a University*. Assumption Press.

Nicolescu, Basarab. 1994. "The Charter of Transdisciplinarity | Inters. org". http://inters.org/Freitas-Morin-Nicolescu-Transdisciplinarity.

Nissani, Noti. 1997. "Ten Cheers for Interdisciplinarity: The Case for Interdisciplinary Knowledge and Research". *The Social Science Journal* 34 (2): pp.201-16.

Norberg, Jon, and Graeme S. Cumming, eds. 2008. *Complexity Theory for a Sustainable Future*. Complexity in Ecological Systems. New York: Columbia University Press.

Nowotny, Helga. 2016. *The Cunning of Uncertainty*. Cambridge; Malden, MA: Polity.

Nowotny, Helga, Peter B. Scott, and Michael T. Gibbons. 2001. *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*. 1st edition. Polity.

O'Connor, James. 1987. *The Meaning of Crisis: A Theoretical Introduction*. Oxford, UK; New York, NY, USA: B. Blackwell.

O'Hara, Maureen. 2007. "Strangers in a Strange Land: Knowing, Learning and Education for the Global Knowledge Society". *Futures* 39 (8): pp.930-41. doi:10.1016/j.futures.2007.03.006.

Olif, Phil, Vincent Palacios, Igrid Johnson, and Michael Leachman. 2013. "Recent Deep State Higher Education Cuts May Harm Students and the Economy for Years to Come | Center on Budget and Policy Priorities". March 19th. http://www.cbpp.org/research/recent-deep-state-higher-education-cuts-may-harm-students-and-the-economy-for-years-to-come.

Olson, Gary A., and John W. Presley. 2011. *Future of Higher Education: Perspectives from America's Academic Leaders*. Routledge.

O'Malley, Brendan. 2016. "Rectors Gather to Establish BRICS Network University – University World News". *University World News*. April 1st. http://www.universityworldnews.com/article.php?story=20160401222240569.

O'Neill, Kara. 2015. "UK Students Are Using 'Sugar Daddy' Websites to Fund Their Way through Uni". *Mirror*. October 27th. http://www.mirror.co.uk/news/uk-news/number-students-using-sugar-daddy-6714056.

Osberg, Deborah, Gert Biesta, and Paul Cilliers. 2008. "From

Representation to Emergence: Complexity's Challenge to the Epistemology of Schooling". In *Complexity Theory and the Philosophy of Education*, edited by Mark Mason, 1st edition, pp.204-17. Chichester, West Sussex, UK; Malden, MA: Wiley-Blackwell.

Osborne, Thomas. 2004. "On Mediators: Intellectuals and the Ideas Trade in the Knowledge Society". *Economy and Society* 33 (4): pp.430-47. doi:10.1080/0308514042000285224.

Ostry, Jonathan D., Prakash Loungani, and Davide Furceri. 2016. "Neoliberalism: Oversold? – Finance & Development, June 2016". *IMF Finance & Development*, June, pp.38-41.

Page, Scott E. 2011. *Diversity and Complexity*. Primers in Complex Systems. Princeton, NJ: Princeton University Press.

Parr, Chris. 2014. "The Future of Higher Education? Five Experts Give Their Predictions". *Times Higher Education (THE)*. March 5th. https://www.timeshighereducation.com/the-future-of-higher-education-five-experts-give-their-predictions/2011867.article.

Piaget, Jean. 1972. "The Epistemology of Interdisciplinary Relationships". In *Interdisciplinarity: Problems of Teaching and Research in Universities*. Centre for Educational Research and Innovation (CERI). Paris, France: OECD.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Translated by Arthur Goldhammer. Cambridge Massachusetts: The Belknap Press of Harvard University Press.

Prisco, Giulio. 2016. "Dubai Claiming Position at Forefront of Blockchain Technology". *Bitcoin Magazine*. June 14th. https://bitcoinmagazine.com/articles/dubai-claiming-position-at-forefront-of-blockchain-technology-1465933930.

Proctor, Robert, and Londa L. Schiebinger, eds. 2008. *Agnotology: The Making and Unmaking of Ignorance*. Stanford, Calif: Stanford University Press.

Readings, Bill. 1997. *The University in Ruins*. Harvard University Press.

Rieckmann, Marco. 2012. "Future-Oriented Higher Education: Which Key Competencies Should Be Fostered through University Teaching

and Learning?" *Futures* 44 (2): pp.127–35. doi:10.1016/j.futures.2011.09.005.

Rizvi, Fazal, and Bob Lingard. 2009. *Globalizing Education Policy*. New York: Routledge.

Roeder, Mark. 2011. *The Big Mo: Why Momentum Now Rules Our World*. Virgin Digital.

Rose, Martin. 2015. "Immunising the Mind: How Can Education Reform Contribute to Neutralising Violent Extremism?" London: British Council Working Paper.

Ross, Dorothy. 1992. *The Origins of American Social Science*. Revised edition. Cambridge University Press.

Roubini, Nouriel, and Stephen Mihm. 2011. *Crisis Economics: A Crash Course in the Future of Finance*. Penguin.

Sardar, Ziauddin. 1993. "Colonizing the Future: The 'other' Dimension of Futures Studies". *Futures* 25 (2): pp.179-87. doi:10.1016/0016-3287(93)90163-N.

———. 1999. *Rescuing All Our Futures: The Future of Futures Studies* (New York: Adamantine Press)

———. 2006. *How Do You Know?: Reading Ziauddin Sardar on Islam, Science and Cultural Relations*. Edited by Ehsan Masood. 1st edition. Paperback edition. London; Ann Arbor: Pluto Press.

———. 2010a. "The Namesake: Futures; Futures Studies; Futurology; Futuristic; foresight – What's in a Name?" *Futures* 42 (3): pp.177-84. doi:10.1016/j.futures.2009.11.001.

———. 2010b. "Welcome to Postnormal Times". *Futures* 42 (5): pp.435-44. doi:10.1016/j.futures.2009.11.028.

———. 2015. "Postnormal Times Revisited". *Futures* 67 (March): pp.26-39. doi:10.1016/j.futures.2015.02.003.

Sardar, Ziauddin, and Iwona Abrams. 2008. *Introducing Chaos: A Graphic Guide*. New edition. Icon Books Ltd.

Sardar, Ziauddin, and Jerome R. Ravetz. 1994. "Complexity: Fad or Future?" *Futures* 26 (6): pp.563-67. doi:10.1016/0016-3287(94)90028-0.

Sardar, Ziauddin, and John A. Sweeney. 2016. "The Three Tomorrows of Postnormal Times". *Futures* 75 (January): pp.1–13.

doi:10.1016/j.futures.2015.10.004.

Schejbal, David. 2012. "In Search of a New Paradigm for Higher Education". *Innovative Higher Education* 37 (5): pp.373-86. doi:10.1007/s10755-012-9218-z.

Schneiders, Ben, and Royce Miller. 2015. "Revealed: The Rampant Exploitation of Foreign Workers in Australia". *The Sydney Morning Herald*. October 1st. http://www.smh.com.au/national/investiga tions/black-jobs-rampant-exploitation-of-foreign-workers-in-australia-revealed-20150930-gjxz7q.html.

Scott, Michael. 2016. "Advancing 'Liberating Technologies': An Interview with Humanitarian Blockchain". *BTCManager.com*. May 26th. https://btcmanager.com/news/advancing-liberating-technolo gies-an-interview-with-humanitarian-blockchain/.

Semetsky, Inna. 2010. "Ecoliteracy and Dewey's Educational Philosophy: Implications for Future Leaders". *Foresight* 12 (1): pp.31-44. doi:10.1108/14636681011020164.

Sharma, Ruchir. 2016. *The Rise and Fall of Nations: Ten Rules of Change in the Post-Crisis World*. Allen Lane.

Sharma, Yojana. 2012. "Universities Need to Serve Regional Economy, Society – OECD – University World News". *University World News*. May 20th. http://www.universityworldnews.com/ article.php?story=20120517121051359.

Skolnik, Michael L. 1998. "Higher Education in the 21st Century". *Futures* 30 (7): pp.635-50.

Skúlason, Páll. 2015. *A critique of universities: reflections on the status and direction of the modern university*. Reykjavík: University of Iceland Press.

Snoek, Marco, Gavin Baldwin, Paul Cautreels, Torsten Enemaerke, Valerie Halstead, Gillian Hilton, Torunn Klemp, et al., 2003. "Scenarios for the Future of Teacher Education in Europe". *European Journal of Teacher Education* 26 (1): pp.21-36. doi:10. 1080/0261976032000065616.

Stables, Kay, and Steve Keirl, eds. 2015. *Environment, Ethics and Cultures: Design and Technology Education's Contribution to Sustainable Global Futures*. Sense Publishers.

Steinmetz, George, ed. 2013. *Sociology & Empire: The Imperial Entanglements of a Discipline*. Politics, History, and Culture. Durham: Duke University Press.

Stember, Marilyn. 1991. "Advancing the Social Sciences through the Interdisciplinary Enterprise". *Social Science Journal* 28 (1): pp. 1-14.

Sterling, Stephen. 2012. "The Future Fit Framework". Heslington, York: The Higher Education Academy. https://www.heacademy. ac.uk/sites/default/files/future_fit_270412_1435.pdf.

Sterling, Stephen R. 2001. *Sustainable Education: Re-Visioning Learning and Change*. Schumacher Briefing, no. 6. Totnes: Green Books for the Schumacher Society.

Stiegler, Bernard. 2015. *States of Shock: Stupidity and Knowledge in the 21st Century*. 1st edition. Polity.

Su, Ya-Hui, Li-Yia Feng, Chao-Chin Yang, and Tzu-Ling Chen. 2012. "How Teachers Support University Students' Lifelong Learning Development for Sustainable Futures: The Student's Perspective". *Futures* 44 (2): pp.158-65. doi:10.1016/j.futures.2011.09.008.

Tapscott, Don, and Alex Tapscott. 2016. *Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World*. New York: Portfolio/Penguin.

Tham, Joo-Cheong. 2015. "Australia Grows Richer by Exploiting Foreign Students". *The Age*, August 19th. http://www.theage.com. au/comment/tackling-the-exploitation-of-international-student-workers-20150818-gj1ge3.html.

The Design-Based Research Collective. 2003. "Design-Based Research: An Emerging Paradigm for Educational Inquiry". *Educational Researcher* 32 (1): pp.5-8.

The Economist. 2014. "The Digital Degree", June 28th. http://www. economist.com/news/briefing/21605899-staid-higher-education-business-about-experience-welcome-earthquake-digital.

Thompson, Robert J, Jr. 2014. "A New Paradigm for Liberal Education". *Liberal Education*.

Toffler, Alvin. 1990. *Future Shock*. New York: Bantam Books.

Tomozii, Simona Elena, and Ioana Topală. 2014. "Why Do We Need

to Change the Educational Paradigms?" *Procedia – Social and Behavioral Sciences* 142 (August): pp.586-91. doi:10.1016/j.sbspro.2014.07.670.

Tonn, Bruce E. 2007. "Futures Sustainability". *Futures* 39 (9): pp.1097-1116. doi:10.1016/j.futures.2007.03.018.

UNICEF. 2015. "Girls' Education and Gender Equality". *UNICEF.* July 23rd. http://www.unicef.org/education/bege_70640.html.

United Nations. 2014. "Kyoto Protocol". *UN Framework Convention on Climate Change.* http://unfccc.int/kyoto_protocol/items/2830.php.

———. 2016. "Millennium Development Goals: 2015 Progress Chart". Statistics Division, Department of Economic and Social Affairs, United Nations. Accessed January 29th.

Universities in the Knowledge Economy. 2015. "About UNIKE". September 28th. http://unike.au.dk/about-unike/.

Universities UK. 2012. "Futures for Higher Education: Analysing Trends". *Universities UK.* January 26th. http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/futures-for-higher-education.aspx.

Van de Sande, Alex. 2015. "How to Build Your Own Transparent Bank on the Blockchain". *Ethereum Blog.* December 7th. https://blog.ethereum.org/2015/12/07/ethereum-in-practice-part-3-how-to-build-your-own-transparent-bank-on-the-blockchain/.

Viacava, Keitiline Ramos, and Eugenio Avila Pedrozo. 2010. "Higher Education in Management: Reinventing the Paradigm to Gain the Capacity to Handle Today's Complexity". *On the Horizon* 18 (1): pp.45-52. doi:10.1108/10748121011020994.

Vincent-Lancrin, Stephan. 2004. "Building Futures Scenarios for Universities and Higher Education: An International Approach". *Policy Futures in Education* 2 (2): pp.245-63.

Waldrop, M. M. 1993. *Complexity: The Emerging Science at the Edge of Order and Chaos.* Pocket Books.

Watson, William R., and Sunnie Lee Watson. 2013. "Exploding the Ivory Tower: Systemic Change for Higher Education". *TechTrends* 57 (5).

Watson, William R., Sunnie Lee Watson, and Charles M. Reigeluth. 2012. "A Systematic Integration of Technology for New-Paradigm Education". *Educational Technology*, October.

Wellmon, Chad. 2015. *Organizing Enlightenment: Information Overload and the Invention of the Modern Research University*. Baltimore: Johns Hopkins University Press.

Wenger, Etienne. 2008. *Communities of Practice: Learning, Meaning, and Identity*. 16th printing. Learning in Doing: Social, Cognitive, and Computational Perspectives. Cambridge: Cambridge Univ. Press.

Wheeler, Keith A., and Anne Perraca Bijur, eds. 2000. *Education for a Sustainable Future: A Paradigm of Hope for the 21st Century*. Innovations in Science Education and Technology. New York: Kluwer Academic/Plenum Publishers.

White, Tom. 2016. "Generation Z – Why We Need to Future-Proof Universities – University World News". *University World News*. June 10th. http://www.universityworldnews.com/article.php?story=2016052514252692.

Willmott, H. 2011. "Journal List Fetishism and the Perversion of Scholarship: Reactivity and the ABS List". *Organization* 18 (4): pp.429-42. doi:10.1177/1350508411403532.

Wilson, Tim. 2012. "A Review of Business–University Collaboration". London: Department of Business, Innovation and Skills. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32383/12-610-wilson-review-business-university-collaboration.pdf.

Wolfe, Julianne K., and David W. Andrews. 2014. "The Changing Roles of Higher Education: Curator, Evaluator, Connector and Analyst". *On the Horizon* 22 (3): pp.210-17. doi:10.1108/OTH-05-2014-0019.

Wolff, Richard D. 2016. *Capitalism's Crisis Deepens: Essays on the Global Economic Meltdown*. Haymarket Books.

World Bank. 1994. "Higher Education: The Lessons of Experience". The International Bank for Reconstruction and Development. http://siteresources.worldbank.org/EDUCATION/Resources/2782

00-1099079877269/547664-1099079956815/HigherEd_lessons_
En.pdf.

————., ed. 2002. *Constructing Knowledge Societies: New Challenges
for Tertiary Education*. Directions in Development. Washington,
DC: World Bank.

————. 2013. "Millennium Development Goals I Data". December 3.
http://data.worldbank.org/about/millennium-development-goals.

World Health Organization. 2015. "WHO I HIV/AIDS". *WHO*.
November. http://www.who.int/mediacentre/factsheets/fs360/en/.

————. 2016. "WHO I Disease Outbreak News (DONs)". *WHO*.
Accessed January 29th. http://www.who.int/csr/don/en/.

Yahoo 7 News. 2016. "More 'Young, Educated, Broke' Australian
Students 'Seek Arrangements' with Sugar Daddies". *Yahoo7 News*.
February 1st. https://au.news.yahoo.com/a/30705140/more-young-
educated-broke-australian-students-seek-arrangements-with-sugar-
daddies/.

Yamamoto, Gonca Telli, and Faruk Karaman. 2011. "Education 2.0".
On the Horizon 19 (2): pp.109-17. doi:10.1108/10748121111
38308.

Yeravdekar, Vidya Rajiv, and Gauri Tiwari. 2014. "Internation-
alization of Higher Education in India: How Primed Is the Country
to Take on Education Hubs?" *Procedia – Social and Behavioral
Sciences* 157 (November): pp.165-82. doi:10.1016/j.sbspro.2014.
11. 020.

Young, Mike. 2015. "UCPH to Stop All New Hiring: PhD Cuts, Clo-
sure Threats". *Universitetsavisen*. October 13th. http://university
post.dk/article/ucph-stop-all-new-hiring-phd-cuts-closure-threats.

Zadja, Joseph. 2002. "Education and Policy: Changing Paradigms
and Issues". *International Review of Education* 48 (1/2).

Zinser, Richard. 2012. "A Curriculum Model of a Foundation for
Educating the Global Citizens of the Future". *On the Horizon* 20
(1): pp.64-73. doi:10.1108/10748121211202080.

ZIAUDDIN SARDAR

From Islamization to Integration of Knowledge

AT THE 1744 Treaty of Lancaster, in Pennsylvania, between the Government of Virginia and the Six Nations, the Commissioners from Virginia, motivated to improve the conditions of the indigenous people, expressed their wish to establish a Fund for Educating Indians youth at Williamburg College. If the Six Nations would send down half a dozen of their young lads at our college, the Government spokesman said, we would provide for them and ensure that they are educated in the ways of the modern world. The Indian spokesman thought for a moment, and then replied:

> We know that you highly esteem the kind of learning taught in those Colleges, and the maintenance of our young men, while with you, would be very expensive to you. We are convinced, therefore, that you mean to do us good by your proposal; and we thank you heartily. But you, who are wise, must know that different nations have different conceptions of things; and you will therefore not take it amiss, if our ideas of this kind of education happen not to be the same as yours. We have had some experience of it. Several of our young people were formerly brought up at the Colleges of the Northern Provinces; they were instructed in all your sciences, but, when they came back to us,

they were bad runners, ignorant of every means of living in the woods, unable to bear either cold or hunger, knew neither how to build a cabin, take a deer, or kill an enemy, spoke our language imperfectly, were therefore neither fit for hunters, warriors, nor counsellors. They were totally good for nothing. We are however not the less obliged by your kind offer, though we decline accepting it. And to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take care of their education, instruct them in all we know, and make men of them.

Different nations have different conception of things; and, we can add, after Michel Foucault, *The Order of Things*. It is through education that a nation, a society, or a civilization, consciously passes on the accumulated skills, knowledge and wisdom of the past to future generations. Education not only preserves the cultural identity and historical legacy of a society but ensures its survival as a distinct entity. It furnishes a worldview within which the society seeks to solve its problems, delineates it social relations and economic activity, makes sense of itself, pushes the frontiers of knowledge, and continues as a living entity. The Indians realized that the education offered by the Government of Virginia did not equip their young with skills and knowledge they needed to survive; worse, it threatened the very existence of their culture and society.

A society without its own sophisticated education system, designed to preserve and transmit the values and cultural traits that ensure its survival, will either be colonized or lose the distinct elements of its worldview. Both the individual and society suffer from the absence of appropriate educational institutions. The individual is denied the social instrument through which a positive sense of religious values and cultural identity can be developed. The society is deprived of its human capital with the result that almost all spheres – from values and skills to governance, law, commerce, finance, industry and cultural production – go into irreparable decline. Thus, education is not simply a process through which knowledge is imparted; it is also, in the shape of higher education, the mechanism through which knowledge is

actually generated. Even if Muslim societies have values to share, without a thriving education system, Abdelwahab El-Affendi notes, it 'does not have much knowledge to share'. This is 'the crisis' that has confronted Muslim societies since the seventeenth century onwards when 'almost all the knowledge Muslims possessed became worthless overnight in terms of worldly value'. But it was not simply worldly knowledge that evaporated from Muslim societies. The decline of great Muslim educational institutions, described so aptly by George Makdisi in *The Rise of Colleges,* also eroded the appreciation of Muslim heritage and legacy, and led to the erosion of Muslim norms and values, and perversion of religious knowledge.

But the 'Six Nations' anecdote also points towards a predicament. As El-Affendi points out, 'while the Indians were right about the inappropriateness of the new knowledge to their societies at the time', and thus shunned the new knowledge, 'this choice did nothing to preserve their cultures or save them from colonialism and subjugation'. We are thus faced with a fundamental paradox: 'to what extent can the capacity to absorb knowledge within an existing cultural paradigm assume a certain level of knowledge acquisition to start with?' The Indians, like the Muslim who followed a similar path later on, did not help themselves by remaining ignorant; 'the resulting power differential drove the former to extinction and the latter to subjugation'. So we need to balance the other side of the equation: 'we need to admit that our spiritual values cannot survive without the power to protect our societies from subjugation', which means we need to have some appreciation and excellence in contemporary knowledge.

The function of this chapter is to synthesize extensive deliberations on reform of higher education in the Muslim world carried out in numerous meetings held under the auspices of the International Institute of Islamic Thought (IIIT); and present a more coherent picture of the arguments and positions. I have used various papers presented at these meetings (including those by Abdelwahab El-Affendi, Jeremy Henzell-Thomas, Anwar Ibrahim, Abdulkader Tayob, and Abdulaziz Sachedina), commentaries on papers, discussions on e-mail, and supplementary conversations as my raw material. Of course, the synthesis

is infused with my own arguments, critique and perspective, as one would expect. Finally, I have tried to integrate various recommendations and suggestions into an overall framework that moves the project forward in a contemporary and meaningful way.

I begin by retracing some relevant history.

REVISITING HISTORIES

Our concerns and criticism about knowledge and education are not too far removed from those that led Ismail Raji al Faruqi and the International Institute of Islamic Thought (IIIT) to embark on the 'Islamization of Knowledge' project. Much like the Six Nations, al Faruqi and his colleagues understood that the modern education system, transferred and imposed wholesale from the West complete with its basic assumptions and dogmatic conceptions, was corrosive to the value system of Muslim societies. The products of this system were alienated from their own societies, were often poor counterparts of their western contemporaries, and seldom contributed to the positive development of their own countries. Westernized universities in Muslim countries tend to exemplify middle-class western culture, and the norms and values that go with it. The education they provide either overlooks or undermines the spiritual development of the individual as well as emphasize the material aspect of education at all levels. Even if the graduates of modern educational institutions displayed a sense of independent inquiry and intellectual curiosity, which was rarely the case, they patently lacked, to use the words of Jeremy Henzell-Thomas, the Qur'anic notion of 'consciousness and knowledge' – 'that is the discernment of truth, which, at its highest level, is knowledge of God'.

Given all the criticism that the 'Islamization of Knowledge' project has received, including from me, what need is there to revisit it? It is important to have a sense of history. No attempt at reform can take place in total vacuum. We always build on previous projects through critiquing them and move forward by learning from their successes and failures. Moreover, no attempt at reform is totally devoid of merit

even though it may have been discredited by later criticism based on hindsight.

Indeed, the 'Islamization of Knowledge' project was itself a product of criticism of early attempts at tackling 'the malaise of the ummah' – even though it was not explicitly stated. In his initial paper that started our discussions, El-Affendi pointed out that,

> by the end of the nineteenth century, perceptive minds like Sayyid Jamal al-Din al-Afghani and Kayr al-Din al-Tunisi began to notice the barren nature of the new school system set up in Istanbul and Cairo... Afghani noted the failure of the new schools, sixty years after the first were established, to produce any self-sustaining system of autonomous knowledge production. His prognosis at the time was that it was because those schools did not teach philosophy. There was a sense in which he was right, since teaching fragments of knowledge and technical expertise without an over-arching framework and vision of the world is not likely to produce knowledge in any meaningful sense of the world. He himself gave an example of the fundamental 'philosophical' transformation the Quran brought about in the Arab frame of mind as the galvanising and decisive factor which brought the Islamic civilisation into existence. Although he did not say this, but the implication was that in Europe, the radical philosophical transformation, in this case the Enlightenment, was the decisive factor in creating the new framework of knowledge production and acquisition.

In his comments on El-Affendi, Anwar Ibrahim quotes Muhammad Iqbal: knowledge itself, without the requisite virtues such as humility, generosity, the love of truth and justice, will be 'as cold as death, like Satan's progeny...but if it blends with love, it joins the ranks of high celestial spirits'. Al Faruqi and his fellow travellers, including AbdulHamid AbuSulayman, Taha Jabir Al Alwani, Mona Abdul-Fadl and others were building on the works of Sayyid Jamal al-Din al-Afghani, Kayr al-Din al-Tunisi, Muhammad Iqbal, Malik Bennabi, Muhammad Asad, Ali Shariati and numerous others one can mention.

The most obvious thing that jumps out of the pages of *Islamization of Knowledge: General Principles and Work Plan* (hitherto referred as *Work Plan*) is its pain and anger. There is an all too evident acute agony at the plight of the Muslims: 'the centuries of decline have caused illiteracy, ignorance and superstition to spread among Muslims' and 'these evils have caused the average Muslim to withdraw into the bliss of blind faith, to lean toward literalism and dogmatism'; every Muslim state is 'divided against itself'; and the core cause of this malaise is 'the intellectual and methodological decline of the ummah'. The anger is largely directed towards the West: it has 'successfully fragmented the ummah'; imposed, both by force and persuasion, 'a secular system of education' that has undermined 'the very foundations of the faith and culture' of Muslim societies; and through 'a well-thought out and well-planned strategy' ensured that 'the Islamic components of the curriculum remain unchanged' and would thus 'remain out of touch with reality and modernity'.

If the diagnosis was correct in 1982, when the project was initially launched and *Work Plan* first published (the second edition came out in 1989), it is even more pertinent today. The *Work Plan* described 'the malaise of thought and methodology', and the state of education in Muslim societies, as a 'crisis'. The 2003 *Arab Human Development Report: Building a Knowledge Society*, talked of a 'knowledge deficit' that was 'deeply rooted' and 'grave'. Now Ibrahim sees 'a host of issues that cumulatively give the distinct picture of the state of education in Muslim countries' as 'catastrophic'. The language itself suggests that we are on a sharp decline towards the abyss.

Another aspect of the *Work Plan* that can be read between the lines is its concern for meaning. The discussion about the ossification of 'traditional methodology', the issues of *ijtihad* that was restricted 'to those who saw no need of it' and were convinced that all was 'absolutely adequate' and 'the problem of the Muslim world was merely one of human reluctance to realise the value of Islam' is essentially about meaning. The basic argument here is that *fiqh* and its methodology as well as Islam itself has been drained of meaning. That's largely why Muslim societies lack purpose and a sense of direction. Without

meaning, there can be no purpose in the lives of Muslims; and without purpose the western or traditionally educated Muslim, can neither be an agent who adopts some ends, nor become the means to an end. Muslims could thus hardly be expected to devote themselves to the achievement of something. Again, this insight is not explicitly stated but has to be teased out from the text.

However, there is something that is explicitly stated: 'first principles of Islamic methodology'. I would suggest that it is not so much an overt methodology but the basic axioms of the worldview of Islam. Starting from the Unity of Allah, 'the first principle of Islam and of everything Islamic', the *Work Plan* systematically leads us to the unity of creation (cosmic order, and the interconnection of everything), the unity of knowledge, unity of life (human existence is an *amanah* from God, and human beings are trustees, or *khalifah*, of the abode of our terrestrial journey), unity of humanity, and finally the complementary nature of revelation and reason. Collectively, these axioms offer us an excellent framework both for the pursuit of knowledge and for the reform of Muslim education.

Just how relevant and contemporary is this framework can be judged by the wide-ranging criticism in the academic literature on the fragmentary nature of knowledge and the reductive mode of education in the institutions of higher learning. The 'first principles' also answer a question frequently raised by Henzell-Thomas: 'don't we need to get beyond the attachment to competing paradigms and models (which are usually inherently dichotomous and adversarial) and realize that the way forward is a new mode of consciousness which is integrative and inclusive?'. Henzell-Thomas suggests that this is in fact the message of the Qur'an as well as a great deal of contemporary thought, for example in philosophy and futures studies, which emphasizes the 'integral' approach to knowledge production and education. He cites the work of the philosopher Jean Gebser who argues that humanity is at the stage of transition from the 'Mental' to the 'Integral' structure of consciousness. Gebser described 'the deficient form of the "Mental" structure as the value-free ontology of rational materialism, but upheld that this moribund structure could not be renewed through a return

to "values"; rather, a transition was needed to an "Integral" mode of consciousness which was not fixated on dualistically opposed categories, one-sided perspectives, fixed frames, and the like'. In futures studies, there is a distinct methodology called 'integral futures' that explicitly seeks to integrate different perspective as well as the Self and the Other. The 'first principles' provide just such an integral framework which emphasize 'unity in multiplicity'.

So the *Work Plan* does offer us something concrete to build upon. Far from reinventing the wheel, the 'first principles', the quest for meaning, and the diagnosis of the 'crisis', which has turned into a 'catastrophe', facing Muslim societies should be our starting point for any future endeavor.

Problems arise when the *Work Plan* attempts to answer the question posed by Afghani, and reframed by El-Affendi: 'why aren't our institutions generating original knowledge?' The answer provided by the *Work Plan*, to put it briefly, is that western knowledge does not provide Muslim society with real meaning; for it to be meaningful to the ummah knowledge has to be 'Islamized'. 'Islamization' is posited as an anti-thesis to 'westernization' and 'modernization'; and 'Islamization of knowledge' is presented as a process that 'reflects the objectives, norms and ultimate purpose of revelation'. The *Work Plan* proposes that we start by mastering contemporary disciplines of social sciences and the legacy of Islam and – essentially – infuse the two. Muslim scholars must, it states, integrate the new (western) 'knowledge into the corpus of the Islamic legacy by eliminating, amending, reinterpreting, and adapting its component as the worldview of Islam and its values dictate. The exact relevance to the philosophy of Islam and the method and objective of each discipline needs to be determined. A new way in which the reformed discipline can serve the ideals of Islam must be determined and a new trail must be blazed'. This is where the basic misconception occurs: there is a lack of awareness about how knowledge is produced in contemporary society, how disciplines have evolved and the functions they perform, and about the relationship between knowledge and worldview. The *Work Plan* also assumes that new knowledge will be created simply by creating new

institutions devoted to Islamization as a linear process. But as El-Affendi points out the problem is circular in nature: to produce new knowledge we need new institutions, but institutions cannot be produced without new forms of knowledge. Moreover, despite its emphasis on integration of knowledge, the 'Islamization' agenda, as Henzell-Thomas suggests, 'actually perpetuate unhelpful and obstructive aspects of the secular/religious dichotomy'. And, Henzell-Thomas asks further, 'how is "Islamization" to be guarded from the negative connotations attached not only to the term itself but also to the perceived spectre of "Islamification"' – the spectre that is haunting the Muslim world today?

The issues of the legacy of Islam raised by the *Work Plan* are also pertinent and relevant to our discussions. It is our historical legacy that provides us with a sense of continuity and identity – where we are going, and want to go, depends to some extent on where we are coming from. To have any inkling of our future, we need to have some understanding of our past. Our view of history shapes how we see the present and envisage a future – as demonstrated by this project – and thus it dictates what answers we produce for our current and future problems. As Henzell-Thomas notes, 'the intellectual history of Islam grappled with some fundamental issues on knowledge, ethics, self and society. I see these debates as resources for critical reflection in Islamic educational reform'. Our legacy has deep roots in liberal arts, liberalism and humanism that we need to re-examine. However, the *Work Plans* presents '*the* legacy' as a singular entity, something which could be processed, classified and mastered once and for all – not as pluralistic histories that we read, re-read, interpret and reinterpret and constantly revisit. This notion reflects Henzell-Thomas' frustration, articulated with reference to Malik Bennabi who 'attributed what he called "civilizational bankruptcy" (particularly within Muslim societies) to the dearth of new ideas, and the concomitant tendency to keep on harking back to the achievements of the "golden age of Islamic civilisation" built by their forefathers instead of examining how the values and principles which gave rise to such a civilisation can be renewed, re-interpreted and applied in the contemporary world'.

One must also note the tendency amongst certain traditional and conservative Muslims to see Islamic history, particularly the formative phase of Islam, as offering neat and complete solutions to all our ills ('the ulama have solved all our problems, brother'). Our historic legacy 'consists of contradictions and radical alternatives', and deserves to be appreciated as 'a record of thinking about human experience' in a particular time and context.

How we need to engage with history, and how it demonstrate relevance to our current problems, is well illustrated by Abdulkadar Toyab. Through a critical engagement with Rumi, Tayob shows that his thought provides us with acute insights into identity and explorations of self and Other – a problem not just for Muslim societies but for all societies. As Toyab tells us, 'identity and authenticity are critical issues in modern societies, endlessly debated in philosophy, the humanities and the social sciences. I have identified it as a problem in modern educational reform programmes and discourses of Muslims in the last hundred years'. Of course, Rumi does not provide us with all the answers but his works do provide 'a radically new perspective from modernist and postmodernist readings of identity' – and indicate the general direction of travel we need to undertake.

Our future direction of travel thus involves basing our analysis both on the first principle of the *Work Plan*, the creative use of our intellectual history, and a much more advanced understanding of how knowledge is produced, maintained and used in contemporary society.

THE FABRIC OF KNOWLEDGE

Knowledge and worldview are intimately related. Knowledge is never produced in a vacuum; it is always embedded within the axioms and assumptions of the culture and worldview within which it is produced. The structure of 'modern knowledge', and its divisions into various disciplines, is a direct product of the western worldview. Physical and social reality is not neatly laid out in a pattern exemplified by disciplinary structure of western knowledge system. The idea that reality is compartmentalized as 'physics' and 'chemistry', 'sociology' and

'anthropology', 'religion' and 'politics', 'law' and 'ethics' is not based on some objective and universal axiom; rather, it is a construction designed according to how a particular culture sees 'reality' and how it seeks to understand, manage, control and subjugate all that is 'out there'. Each academic discipline has emerged within a particular cultural context; and each has its own specific history that defines its contours. Modern disciplines, as we know and understand them, began when such fields of study as geography, sociology, anthropology and history became professions. Geography acquired prominence during the sixteenth and seventeenth centuries, the European 'age of discovery' when the rapid expansion of colonial powers in Asia and Africa and the need for collection of revenues made it necessary to survey the land. The desire to manage and control the natives Europe conquered gave rise to anthropology. While the function of anthropology was to study the exotic Others with the aim of proving the inalienable superiority of Europe, the objective of sociology was to inquire into the lifestyles of the underclass, the Other within Europe. The function of History, which in its modern reincarnation emerged at about the same time as the nation state, was to put all the pieces together and demonstrate that the History of Europe was in fact Universal History – histories of all other cultures and civilizations were mere tributaries that naturally flowed into the great river of European achievements. Other disciplines, such as Orientalism, psychology, political science and economics, emerged after the Enlightenment, each embedded in its materialistic worldview. All these disciplines developed within this intellectual heritage, and evolved to solve the particular physical, material, mental and intellectual problems of this tradition. Whatever the discipline, the overall narrative was the same: to perpetuate the worldview of the West. This narrative still informs all disciplines. Just because these academic disciplines are accepted and practised throughout the world, and universities everywhere structure their departments according to them, does not mean that they are universally valid or that we are duty bound to work within and perpetuate them. As I have written elsewhere, 'burgers and coke are eaten and drank throughout the world but one would hardly classify them as a universally embraced

and acceptable food: what the presence of burgers and coke in every city and town in the world demonstrates is not their universality but the power and dominance of the culture that has produced them. Disciplines too are like burgers and coke: they are made neither in heaven nor do they exist out there in some "reality" but are socially constructed and develop and grow within specific worldviews and cultural milieu'. As such, disciplines do not have autonomous existence of their own but have meaning largely in the worldview of their origins and evolution. It is hardly surprising then, as the *Work Plan* rightly postulated, the modern disciplines have little meaning for Muslim cultures.

There are three other aspects of academic disciplines that we need to appreciate. First, disciplines not only represent a presumed structure of knowledge, they also *discipline* – that is, they punish and correct. 'They perform', writes Indian historian Vinay Lal,

> the work of disciplining recalcitrant elements of society, endorsing and justifying inequality, creating new forms of oppression, and stifling dissent. The academic disciplines have so disciplined the world – one has only to think of the extraordinary legitimacy granted to "economic science" and the role of economists as the pundits of our times, whose very word, when dispensed through such conduits of the imperial financial architecture as the World Bank and the IMF, is law to beleaguered developing countries – that any intellectual, social, cultural, or economic intervention outside the framework of modern knowledge appears to be regressive, a species of indigenism, the mark of obdurate primitives, and certainly futile.

Second, they colonize the future. The time dimension of the West is not limited to the past and the present: the West is also the future. The West was not just in history; it is remade in the present and reconstructed in the future by academic disciplines. As disciplines developed and are internalized more and more by other cultures, perpetuated by universities everywhere, they becomes an integral part of the global consciousness. As such, much of the immediate and near

future has already been colonized by the western worldview. When the *Work Plan* was first produced, the colonization of the future was known as 'westernization'. Now it goes under the rubric of 'globalization'. It may be naïve to equate the former with the later, but the end product is the same: the process that is transforming the world into the proverbial 'global village', rapidly shrinking distances, compressing space and time, is also shaping the world in the image of a single culture and civilization.

Third, academic disciplines provide the West with its ultimate power: the power to define. The real power of the West, its worldview with all its axioms and assumptions, is not located in its economic muscle (which is still considerable), its military prowess (no other power on the planet can challenge the military might of the US), and technological ability (which has escalated considerably with the emergence of the Internet). Rather, it resides in its power to define. The West defines what is, for example, freedom, progress, civilization and civil behavior; democracy and human rights; law, tradition and community; reason, mathematics and science; who is a dictator or a terrorist or a moderate person; what is real and what it means to be human. Academic disciplines provide learned, scholarly and rational legitimacy to the defining concepts. The non-western cultures and civilizations have simply to accept these definitions or be disciplined by disciplines and be defined out of existence! Something that is clearly happening to Islam and Muslim societies – this is the real catastrophe.

These three aspects of academic disciplines relate to power; and without addressing and dissecting the issues of power we are not going to make any real progress of reform – however we imagine or plan it. Given this power framework of modern knowledge and its disciplinary structure, which operate like a sophisticated, hydraulic vice, one can legitimately question the recommendation to 'establish centres of excellence in a variety of fields, prioritising the social sciences' as El-Affendi suggests. Even though we may emphasize 'excellence' we will end up in the very fields that undermine and marginalize Muslim cultures. What exactly is this 'excellence' anyway? As Henzell-Thomas

playfully suggests 'we can talk about a professional hit man, but would it not be rather strange to say that Mario is an *excellent* hit man, unless we were members of the Mafia'; 'excellence is not simply about personal mastery of a domain of activity or skill or effectiveness in accomplishing a task but includes excellence of human character, and that has a moral and ultimately a spiritual dimension. There is evidence from the world of sport that amateurs often have much better ethical values than professionals, probably because their objective is not typically to win at all costs'. Even a 'centre of excellence', focussed on existing disciplines of social sciences, is still a transplant if it is located in the Muslim world; and if it situated in a western institutions it simply preserves the dominance of the West. Either way, it contributes to what Henzell-Thomas describes as a sense of cultural 'homelessness' of Muslim societies.

Thus the problem we face in thinking about the reform of higher education in Muslim societies is not simply that 'the secular academic model is not ideologically neutral' and 'perpetrates the materialist-consumerist world view', as suggested by Henzell-Thomas – a realization that echoes the *Work Plan*. The problem is that values and assumptions of the 'secular academic model' actually constitute the paradigm – they *are* the paradigm, as well as the actual mud and bricks building blocks of the disciplines. So one cannot eject the ideological and cultural bias of the 'the secular academic model' if one works within them, within the paradigm. Even if you are a dissenter, or wish to approach the subject from a radically different perspective, the paradigm knows how to discipline and domesticate you. For without these ideological assumptions and cultural values there will be no academic disciplines.

A couple of examples to illustrate this somewhat dense argument would be useful. Consider the nineteenth century discipline of eugenics. It was rightly condemned by right minded and well-meaning academics and thoroughly disgraced. But it did not disappear; it re-emerged as 'Development', which deployed exactly the same evolutionist assumptions and framework to categorize non-western nations, societies and cultures: under-developed, developing, 'emerging' (as

though from the proverbial slime), developed, highly developed. Indeed, development has been no less insidious in its effect on non-western people than eugenics. Think of anthropology, which ashamed of its role as the handmaiden to the colonial enterprise, tried desperately to reinvent itself as 'reflexive anthropology', 'postmodern anthropology', 'radical anthropology' – indeed, there are journals totally devoted to 'rethinking anthropology'. Yet, the axioms and assumptions of the discipline remain intact and despite all the promises to be responsive and responsible to the people it studies, anthropology is hardly a humane discipline. The recent record of anthropologists working amongst the Amazon tribes – where blood has been stolen and sold to corporations for DNA research, viruses have been introduced to test immunity, and tribes have been encouraged to be violent for the benefit of the cameras – amply demonstrates that all the colonial assumptions and cultural prejudices of the discipline are alive and well. Most of the anthropologists today work for corporations, where they help develop culturally sensitive products that could be sold to 'emerging markets'.

The task of reforming education in Muslim societies is thus much more profound then we have hitherto imagined. It has two basic components: to deconstruct the definitional power of the modern knowledge system – complete with its disciplines, institutions, and processes – and its western worldview; and to produce alternative paradigms of knowledge formation, that take into account the histories, legacies and traditions of Islam and offer a more humane and value based appreciation of what constitutes learning and its advancement.

The need for new paradigms is not simply a Muslim concern. Indeed, a growing number of scholars, West and East, are now questioning the dominant paradigms – and hence the defining power of the West – and calling for more humane paradigms that consider the diversity and plurality of our societies and take the needs of the environment and planet as a whole into consideration. Changes in the contemporary context, and the accelerating pace of new technologies and innovations that are transforming the world have given urgency to these demands.

THE CONTEMPORARY CONTEXT

Reform, by its very nature, is future oriented exercise. But it begins in the present; without appreciating the context within which we live and operate meaningful reform is not possible. The world has changed drastically since the days the original *Work Plan* was produced. It has become more globalised and more interconnected. The old paradigm of America leading the world is being undermined as power shifts to China, India and Brazil, and a re-emergent Russia (known as BRIC countries). Serious cracks are beginning to emerge in academic disciplines themselves, for centuries a bastion of stability. The capitalist economic system is not working; or working just for one percent of the world populations who are accumulating the bulk of its wealth at the expense of increasing inequality. Economic theory is under attack from within and without academia. A plethora of recent books have attempted to dethrone it, not least Thomas Piketty's *Capital in the Twenty-First Century* which shows that inequality is intrinsic in economic progress. Development theory lies in tatters. In the age of google maps, Geography is not what it used to be. In fact, no one studies 'geography' any more – they study cities, spatial cognition, urban landscapes, tourism, environment, anything and everything under the rubric of geography. Epistemologically, the Enlightenment idea of Modernity, it is now widely recognized, has failed. The failure of modernity is attributed to a single Western paradigm which dictated its view of change without regard to other cultures. Modernity, and its associated concepts of progress, efficiency, and development, transformed vast swathes of our planet into disaster zones – of which climate change is the most evident example. The 'modern man' is deeply implicated in changing the planet itself: human behavior and its impact on Earth's atmosphere has become so significant as to constitute a new geological epoch – leading to the concept of the Anthropocene, a new geological epoch measured form the time when human activities began to have a global impact on the Earth's ecosystem. The notion of postmodernism, a reaction against the destructive impact of modernity, has also run its course. Its emphasis on

absolute relativism has led to the fragmentation of the world, increasing strife and discord. While rejecting all Grand Narrative, it presented liberal secularism as a Grand Theory of Salvation; and turned out to be a new form of imperialism. Postmodernity has arrived at a globalized levelling of differences which threatens the extinction of culture altogether in terminal post-culture; and has generated an acute crisis of identity that is a major source of so much conflict in today's world. The theory and process of globalization which sees globalization as a one-way street where the flow of ideas is essentially from West to the rest, where Western culture, political institutions and 'free market' are seen as a panacea which has to be imposed, willingly or unwilling, on the rest of the world, is nothing short of disastrous. Even the concept of multiculturalism, rooted in modernity and postmodernity, has become hollow and vacuous and drained of any notion of power. It has turned difference into a fetish. Basically, all these narratives – modernity, postmodernity, globalization, multi-culturalism – privilege liberalism secularism and hence the domination of western culture and western ways of being and doing. This is why China and India appear to be more western than the West itself. The old paradigms, it is being increasingly argued, have really passed their 'sell by' dates!

So the crisis, in all its social, cultural and intellectual dimension, we face is not limited to Muslim societies. The West is also in a state of acute crisis. Indeed, the crisis is global in nature. It is a product of a number of developments over the last few decades. The rate of change, for example, has accelerated rapidly. The processing power of computers has continued to double every two years – as predicted by Moore's law. A smart phone now has more computing power than all the computers used to put a man on the moon. It took 36 years to map the genome of a fly, 13 years to map the human genome, and now you can have your gnome mapped within a day. The noted futurist Jim Dator has pointed out we are facing a 'tsunami of change'. As the world becomes more and more globalised, we become more and more interconnected. Indeed, the whole world is a network criss-crossed by networks of individuals, groups, communities, institutions,

corporations, nations, constantly connected to each other by Twitter, Facebook, Instagram, e-mails, e-lists, internet newsgroups, mobile phones, text, video conferencing, and blogs. Global television channels broadcast 24-hour news. When things are networked they tend to become more complex. Most of the problems we face are global in nature, connected to a web of networks, entrenched in an environment of accelerating change, and are thus highly complex. There is nothing simple about 'fixing the economy' or solving problems of energy shortage, or fighting pandemics (as the Ebola epidemic demonstrates) or doing something about poverty and illiteracy, or changing social, educational or cultural institutions. Complex issues are generally described as 'wicked problems' – that is, to solve one problem one has to solve a plethora of other interconnected problems in relation to each other. A complex system has many positions that are logically inconsistent; problems that require conflicting ideas to understand let alone solve; and numerous groups with irreconcilable views. Contradictions thus become the norm.

It is natural for a networked complex system, full of contradictions and experiencing rapid change, to generate positive feedback and accelerate towards the edge of chaos. We are thus constantly on the verge of crisis and catastrophes ranging from 'market failure', turbulent political change, social unrest, pandemics, mass migration of refugees, 'the crisis of European higher education' to irreversible climate change, mass extinction of species and even the crisis in the 'standard model' of physics!

Elsewhere, I have described the current turbulent and changing times – where the accent is on complexity, contradictions and chaos (the 3Cs) – as 'postnormal times'. The function of the theory is to emphasize that normal paradigms that have so far guided the West and the rest are collapsing. Here, it should suffice to state that it includes the conventional notions of the production of knowledge, the disciplinary structures, and the institutions and processes that sustain and promote it. For any reform to be meaningful, we have to shape paradigms that are 'post' – that is go above and beyond existing 'normal' paradigms.

A complex, interconnected world requires an integrated, unified perspective on knowledge and education – one of the 'first principles' of the *Work Plan*: 'the unity of knowledge'. But the current paradigm intrinsically divides knowledge into smaller and smaller isolated segments: science is separated from social sciences, social sciences are isolated from humanities, humanities are detached from arts; and each discipline within this artificial division is kept in air-tight compartments, jealously guarding its power and territory. Each discipline may thus produce greater refinement but is unable to tackle complex problems, interconnected to a host of other problems in a network. Garry Jacob, CEO of the World Academy of Art and Science (an international organization of 500 intellectuals, of which, it has to be said in the interest of full disclosure, I am a Fellow), describes the current system of knowledge production and higher education as 'akin to driving 1914 Model T Fords down modern superhighways'. 'Modern secular, scientific education', he writes, 'has increasingly restricted the conscious transmission of values to mental, organizational and work values, leading the transmission of core human values to informal social learning. The effort to be purely objective has stripped education of its most valuable essence'. Thus, today we have 'arrived at a critical juncture where perpetuation and extension of the existing paradigm in education and other fields are grossly inadequate to meet the needs of humanity'; and 'there is a pressing need to move beyond existing concepts and models to conceive and implement a system capable of tapping the rich human potential that remains largely underdeveloped and neglected in the existing system'.

The social sciences in the 'existing system' are one of the main culprits in the current paradigm. In social sciences, notes another study by World Academy of Art and Science, which has spent decades researching the problems of knowledge production,

> consistency and unification between and across disciplines are a rare exception. The theories governing each discipline exist in airtight compartments, each in its own separate world of principles and phenomena. It is almost as if the political, social, economic and psychological

human being were different species, each with its own unique characteristics, rather than multiple roles and fields of expression common to all human beings. With few exceptions, each of the social sciences seeks to understand and describe a particular dimension of social reality with minimum reference to the action or interaction with other dimensions. Micro economic theories assume a set of specific conditions rarely found in the real world and regard all variations as intrusive externalities rather than natural and inevitable facts of the interrelationship between the economic, political, social and psychological dimensions of reality. This tendency reaches its acme in the neoliberal concept of free or unregulated markets, based on the premise that law and regulation are external factors interfering with the normal equilibrium-seeking movement between supply and demand. In reality, few markets – other than the black variety and the underworld – could exist at all in the absence of the legal and regulatory framework that defines and protect property rights and contractual relationships. Moreover, economics ignores the large non-monetarized part of human activity, all that we people do without exchange of money, the vital core of our existence without which no society or culture could survive and function, which represented around 80% of value added at the time of Adam Smith. Division and fragmentation of reality are the governing rules and modus operandi in the social sciences. Disciplinary and conceptual boundaries don't just focus attention; they also inhibit the discovery and study of processes that transcend those boundaries and bias public policy development in certain directions.

Thus neither Muslim societies nor the West need more social sciences, which cannot meet the challenges of postnormal times that 'defy comprehension and resolution based on the prevailing principles and specialized knowledge developed by separate social science disciplines'. To be viable as future enterprises, the study argues, social sciences have to deal with complexity and intricate and mutual interdependence of 'all forms of life with one another and their physical environment; the social complexity of myriad interactions

and interrelationships between human beings, their institutions and cultures; and the psychological complexity of conscious and subconscious thoughts, feelings, attitudes, needs, desires, sensations, and impulses which confront us with the insoluble mystery of our own personalities and of all those we relate to'. What 'wicked problems' demand is an approach that emphasises the interconnection of everything ('the unity of creation'), the multi-dimensional political, economic, ecological, social and cultural challenges confronting us all, east and west ('unity of humanity'); and the fact that we are all living interdependent lives on the earth, the abode of our terrestrial journey ('unity of life'). So the first principles, the axioms mistakenly described by the *Work Plan* as a 'methodology', turn out to be essential both for navigating postnormal times and for the future survival of all humanity.

Any attempt at knowledge production that begins with these axioms, even though they are rooted in Islamic thought and worldview, is intrinsically universal. The first principles do not focus on solely on 'Muslims' or 'Muslim societies' but on the whole of humanity. Moreover, a natural corollary of these axioms is that human society and individuality cannot be properly understood in terms of modernity, postmodernism, secularism, positivism, reductionism, formalism and naturalism and numerous other 'isms' that have brought us to the edge of chaos in the first place. Human beings are purposeful. We create social, economic, political and cultural institutions not just to meet certain needs, achieve certain objectives, but also to realize certain values. We pursue knowledge not only to acquire greater understanding and more effective action in the real world but also to promote certain principles that integrate knowledge with our cherished values, emphasize the interdependence of creation, unite humanity, promote equity and justice, and preserve and enhance life. This is what Henzell-Thomas is referring to when he constantly emphasizes 'holistic education' and insists that 'we should be talking about education in a more universal sense'.

Any meaningful attempt to integrate knowledge must include science and technology – something that has been seriously neglected

in our discussions. Henzell-Thomas expressed concern about 'the widespread overemphasis on the applied sciences over the social sciences and humanities in higher education' but also presented the counter-argument 'that the corrective emphasis on science and technology has become unavoidable in view of the indisputably backward state of scientific research in Muslim societies'. A study of 20 member states of the Organization of the Islamic Conference has found that these countries spent only one-seventh of the global average on scientific research from 1996-2003. This equates to 0.34 percent of their gross domestic product. El-Affendi thought that 'the basic needs of society in technical skills are largely being met'. Ibrahim pointed out that some rich Arab states have 'pumped huge sums into science and technology but what is there to show for the research output? This begs the question: was the oil money invested by way of R&D and higher education or was it used to purchase science and technology?' He suggested our reform efforts should be 'broadened to attract more scholars and participants from the physical sciences'. Ibrahim concurred. He argued that in 'the current approach to the Islamization of knowledge endeavour, there is a preponderance of focus on the social sciences while the crisis of the ummah in practical terms can be traced to it being technologically and scientifically lagging behind the non-Muslim communities'. He also proposed that 'our reform efforts should therefore be broadened to attract more scholars and participants from the physical sciences and in time this will add a more balanced critical mass to the intellectual force'.

There are some basic points to be made about science and technology. As Isaiah Berlin pointed out over half a century ago, science and technology, have 'above all others, shaped human history' in our time. It is 'certainly the greatest success story of our time'; and requires great and mounting attention from all quarters. But science cannot take indigenous root in a society where philosophy is shunned and there is a conspicuous absence of culture of curiosity, inquiry and scientific enterprise. Whatever the statistics say or do not say, the fact is that no meaningful science is done, or has been done for over a hundred years, in Muslim societies. Without a thriving scientific and

technological culture, Muslims cannot play any part in shaping human history. Moreover, separating science from other aspects of knowledge, as though it was a totally neutral endeavor, as Tayob notes, is to 'disingenuously separates technique from culture, creating binary relations between form and content, means and ends. The approach assumes that there is nothing that links (science), technology and ethics, form and content. In our times, this approach provides a justification for turning to the West, and reinforces dependency whilst appearing to be independent'. At the very least, science and technology, as the driving forces of the future, also need to be critiqued and deconstructed from the perspective of the 'First Principles'. If, 'Muslim culture identifies true knowledge with moral rectitude', as Henzell-Thomas states, than should we not be exploring the moral and ethical consequences of scientific and technological advances? Integration of knowledge would make little sense if we left an important part of the equation out of the reform agenda. How could we meaningfully promote the unity of creation, humanity or life while allowing science and technology to undermine these very principles?

Tayob goes on to say that those who suggest that social and human sciences could be separated from the technological sciences argue that 'the former would be exclusively drawn from the intellectual legacy of Islam, while the latter as techniques would be imported and developed from the advances made by the laboratories and factories outside (mainly in the West'). But the intellectual legacy of Islam furnishes us with both: a great heritage of scientific works and an equally prodigious inheritance of social and human sciences. We need both to sustain our future endeavors. However, it is not a question of going back to the classical Islamic framework -- even though, as Ibrahim notes, 'we know the Bayt al-Hikmah of the Golden Age of Islam gave birth to not just philosophers but eminent scientists as the holistic pursuit of knowledge saw the genesis of "philosopher-scientists" competent in a wide spectrum of intellectual disciplines'. Our classical heritage was a product of another period, over a thousand years ago where change was slow if not quasi-static and society operated on a different scale and levels of complications. Our classical thought had

its own problems, particularly with plurality and diversity. By anchoring ourselves with classical thought we risk the danger of overlooking plurality and diversity within Islam and may end up deny viable alternative paradigms that are not totally in sync with the classical outlook. But we do need to learn from and build on the heritage, revisit the works of our great thinkers to discover the contemporary relevance of their ideas, and, as Ibrahim once said, instead of preserving the ashes of their fire move forward with its flame.

New paradigms do not emerge over night; nor do they displace existing paradigms suddenly and quickly. Paradigm shifts take decades of sustain thought and effort. Often the new emerges under the shadow of the old. Once again we face a paradox: to generate a new paradigm we need expertise and excellent in the old one! 'Most research bodies currently encourage inter-disciplinarity and cross-disciplinary work', El-Affendi writes,

> Some universities, such as Arizona SU, are experimenting with reconfiguring disciplines (thus abolishing Anthropology altogether in favour of a science of 'human exploration; that brings together biology, archaeology, geography, history, etc.). Some other ventures have gone even further, doing away with disciplines altogether, and forcing all staff to work together.

However, in such outfits you still need someone to be good at the old basic disciplines, understand the latest thinking in discourse analysis, and be fully aware of new methodologies.

> Not only that, but sub-specialisations also need to be catered for. No one these days can master all branches of physics and chemistry, let alone be good at all medical specialisations. Thus it is impossible to do away with many sub-specialisations in disciplines, let alone whole disciplines for simple practical reasons. But even if we decide to do away with disciplines, the entity undertaking such a move must include those who are competent in all the relevant disciplines to ensure that nothing is lost and much is gained by such moves. Otherwise, it could

be like the Mongols chucking books into the Tigris without the slightest idea about what they contained.

There is the other side of the Mongol equation. As Umberto Eco shows in *The Name of the Rose*, specialization can lead to knowing a great deal about a subject yet 'very little is discovered' about the complex patterns that weave the fabric of knowledge. Or, as Ibrahim put it, 'while pursuing specific interests, our minds must never be, to paraphrase Spanish intellectual José Ortega y Gasset, "barbarised" by specialization. We must remain alive to ideas from other disciplines and the general philosophic temper of the time'. So, one way or the other, the old paradigms linger on while the new develop and grow until they become the dominant paradigms – and the old may still continue in some functional way. Our project of reform should thus be seen in multi-generational terms. The seeds we sow in our times will only bear fruit in some not-so-distant future.

THE QUESTION OF LANGUAGE

Once we have determined what we wish to talk about, we need to decide how we talk about it. That is why we have devoted considerable time to the issues of language. Language is the basic tool through which we learn, teach, adapt to change and advance knowledge. It is an inseparable part of how we articulate our worldview, how we conceive ourselves as individuals and societies, shape our perceptions of the world around us, and engage with the world to change it. Yet, language is full of ambiguity and a fertile ground for misinterpretation or misunderstanding. Language is the preeminent tool of culture; and like culture, language has a history, layered like a vast archaeological site, the repository of acquired meaning. 'Language is like a maze of little streets and squares', wrote Wittgenstein, 'of old and new houses, and of houses with additions from various periods; and this surrounded by multitude of new boroughs with straight regular streets and uniform houses'. Like an old but thriving city, such as Fez or Istanbul, language is alive, lived in, adapting the old to new

purposes. But the relationship between language and social change is not, and has never been, direct and uniform. As I have written elsewhere:

> Text is always subject to context and context provides for differential rates of change and usage in language and its multiple meanings. And society, like our language, is always a work in progress where ideas and attitudes as well as behaviours preserve, conserve, adapt, progress, liberalise and change according to the diversity of backgrounds and beliefs of the population at large.
>
> The more complex society becomes, the more specialised contexts it develops. This gives rise to more and more specialised groups, professions, disciplines of learning, as well as interest groups and subcultures, each of which can develop their own language to discuss their own business amongst themselves. At different rates and with varying affects these specialised languages and meaning can pass into the mainstream or affect the rest of society hardly at all. Complexity means different, even contradictory, meanings of words can continue to exist side by side or be used by different groups simultaneously. As new meanings and implications of language are being developed there is no inflexible law decreeing that old implications, associations or evocative import disappear.

We thus need to be precise in our use of language: we have to say what we intend to say, and ensure we say what we mean. Or, as Henzell-Thomas put it, 'one of our pivotal objectives needs to be the marshalling of a level of terminology which provides orientation and balance in the way we navigate concepts'. We have to distinguish authentic concepts from their distortions and counterfeits, their historic meaning and the new meaning we may wish to give them to 'avoid being taken in or manipulated by ideological labels'. So our first task in moving forward towards new paradigms is the development of 'a balance and nuanced terminology based on different levels of description', which is 'a key means in itself of resolving facile dichotomies'.

(As the very least, a concise terminology will help us avoid absurdities like 'Islamicity', raising the connotations of ferocity and causticity. Indeed, during our discussion we came across an 'Islamicity index' described as 'a measure which encompasses laws and governance, human and political rights, international relations, and economic factors', but which create the spectre of Islam globalising the world. The countries that topped the list and are seen as the most faithful to the values of the Qur'an – Ireland, Denmark, Sweden and the UK – would in fact be horrified to know that they have islamicity being pumped into their societies like electricity).

This task begins with the very description of what we have resolved to do, what we wish to talk about. I have used the term 'reform' but is it a process of reform, reconfiguration, revitalization, re-envisioning or transformation? The quest for the answer, according to Henzell-Thomas, is 'a search for the Golden Mean, the "due measure and proportion" invested in creation. A high objective, but are we not talking about "higher" education'?

Henzell-Thomas generously provided a list of terms that have been used in the literature that we may consider:

1. *Reform* has been widely used. It was used, for example, in US-Islamic World Forum paper 'Higher Education Reform in the Arab World', co-convened by the Brookings Project on US Relations with the Islamic World and the State of Qatar; and in the conference on 'Reforms in Islamic Education', held at the Centre of Islamic Studies, University of Cambridge, 9th-10th April, 2011. It might be noted that there are potentially negative connotations (for traditionalists) in the concept of reformation which may suggest a radical, even revolutionary, departure from traditional norms or orthodox teachings.

2. *Reconfiguration* has the sense of remodelling, restructuring, changing the shape. This is certainly one of the important challenges, as for example in the need to reform governance structures and effect major structural changes to address the problems of

accommodating the massive influx of students who seek to enter the tertiary system in many Muslim societies. However, there is also an obvious need not only for *restructuring* but also for *revitalization* of content and values.

3. *Revitalization*, the term (along with 'reform') used in Abdul-Hamid AbuSulayman's occasional paper 'Revitalizing Higher Education in the Muslim World" (IIIT Feb, 2007) and in subsequent papers by the same author. Such revitalization involves, according to Ibrahim, the 'revivification of Islamic knowledge and thought'.

4. *Revision*, the term used in the 2002 *Arab Human Development Report*, which called for a 'radical revision of educations systems in the Arab world' and 'a program for education reform at the pan-Arab level'.

5. *Re-envisioning* and *Revisioning*, the first was used in 'Re-envisioning the Future: Democratic Citizenship Education and Islamic Education', a paper presented by Professor Paul Smeyers (Ghent University and K. U. Leuven) at the annual conference of the Philosophy of Education Society of Great Britain at New College Oxford, 30th March-1st April, 2012. The second can have the general sense of re-evaluation, but it also has potentially pejorative connotations by association with Revisionism, a term which may not only refer to critical re-examination of historical facts or existing historiography, including the revision of fundamental ideological premises, but may also have the negative sense of denial of facts generally accepted by mainstream historians, or (as in the case of fictional revisionism) the making of substantial alterations to the characters or environment of a story. It should be noted that neither of these terms are used in future studies, where the simple term *visioning* – to create a vision of the future – is normally used.

6. *Reinventing*, the title of an October 2012 international conference in Madrid: 'Reinventing Higher Education', where it was argued that higher education in Muslim countries needs a 'radical reinventing'.

7. *Regeneration*, a term often used in the sense of religious 'revival' and 'revivalism', or in urban planning for developing and gentrifying a community.

8. *Transformation*, the term largely associated with genetics where it refers to the natural or artificial alteration of cells, has also been used to refer to large scale changes such as in Dale F. Eickelman June 1999 Templeton Lecture on Religion and World Affairs entitled 'The Coming Transformation of the Muslim World'.

9. *Revolution*, a term much favored by radicals and those seeking to overturn the status quo is also sometimes used in relation to education. As an article in *University World News* reported: 'Saudi Arabia is an academic leader among Arab and Islamic countries and is joining the international scientific and higher education revolution'.

All these terms come wrapped with their particular histories, have positive and negative connotations, and are thus problematic. Further problems arise when we talk about 'authority' and returning to 'original sources'. For if we accept the authority of those who 'know' then we are back to square one: this is where legitimacy for authoritarianism is derived. When Henzell-Thomas urges us to 'distinguish authentic concepts from their distortions and counterfeits', what does he mean by 'authentic'? Who defines what is authentic? Can we pin something down as 'authentic' in history? Has the 'authentic' remained static in history or has it changed? Can we pin down the 'original essence' of things if they are often defined and redefined and lose their 'original' meaning?

Questions such as these raise some big issues. But the main issue

is the obvious tension between the difficulty of pinning down what is supposedly 'authentic' (and thus defining our terms in relation to current conditions) and being as true as possible to the 'original essence' of things. Many young Muslims nowadays are trying to discover what they see as 'authentic Islam', even returning to 'original' primary sources, yet end up with a literalist approach. Indeed, they often accept the 'authority' of those who 'know' in arriving at their literalist interpretation of what it means to be a Muslim in the twenty-first century. As Henzell-Thomas explains, 'authenticity' and 'authority' are connected in that the original meaning of 'authentic' in English was 'authoritative'. 'The word comes from Greek *authentikos* and its essential meaning is "having the authority of the original creator", that is, stamped (or "signed") as coming from that "source", not a fake'. So we are faced with a paradox here: 'how to give space to both shifting and stable meanings, which is also the essential mission of avoiding the perils of, on the one hand, chronic rootlessness and disorientation, and, on the other hand, the aridity and fixity of authoritarian dogma'.

There is also a clear link between 'authentic' and 'original'. To be original, in the Greek sense, is to be 'in accordance with our nature'. As everyone has this innate capacity – even 'simple' illiterate persons have the ability to understand universal principles – everyone could be 'original'. 'It all goes back', writes Henzell-Thomas, 'to a prehistoric Indo-European root which was the source also of English "same, similar, and single". This passed into Latin as *simplus*, "single". The "simple" person is a "single" undivided person, a person who is always "the same", true to himself or herself (Shakespeare: *This above all, to thine own self be true*). Simplicity is like a mirror which reflects the divine unity at the core of every human being'. An original person can thus be authentic and hence authoritative (albeit not authoritarian) because he or she is stamped with the attributes of the ultimate *authority*, the original Creator. This connects us directly with the first principle of the unity of life and its foundation, the Islamic notion of the human being as *khalifa*, 'vicegerent' or 'representative' of God.

The overall aim here is to guard against ideological constructions

of Islam as well as absolute relativism promoted so eagerly in post-modernist thought – and move towards some notion of plurality. The original French notion of ideology saw it as science of ideas and their truth and error but the term rapidly came to signify a total system of thought, emotion and attitude to humans, society and everything. Islamic movements, such as the Muslim Brotherhood and Jamaat-e-Islami, have often constructed Islam as an all-embracing ideology, a total and totalistic system that allows for no dissent, alternative perspectives, or plurality of any kind to flourish. Relativism is valuable when it promotes different viewpoints, perceptions and considerations, and even when it suggest that different views may not necessarily have absolute truth or validity. But it becomes a problem when it suggests, as in postmodernism, that there are no truths at all or nothing that can provide us with meaning. 'So just as we might distinguish the creative world of ideas from the abstract constructs of ideology', notes Henzell-Thomas, we must also be aware of 'the potential trap of a brand of relativism which abolishes all stable meaning'.

Indeed, Henzell-Thomas provides us with an important list of terms that have to be clearly distinguished from each other:

> *identity* from *tribalism* and *sectarianism*, *diversity* from *division*, and *unity* (in diversity) from *uniformity* and the curse of standardised *mono-cultural* attitudes which dichotomise reality into competing *unilateral* or *unipolar* worldviews and ultimately into the isolating pathologies of civilizational *narcissism* and cultural *autism*. At the same time we need to distinguish the *authority* of divine revelation which liberates the human soul from the *authoritarianism* imposed by narrow human formulations which imprison it; and the existence of *absolute* and timeless truths from the tyranny of an *absolutism* which obliterates all context. The process can be carried further to distinguish *community* from *communalism (or communitarianism), relationship* from *relativism*, and *individuality* from *individualism* and *solipsism*'; and 'between *secularism* as an ideology seeking to marginalise or exclude religious voices in the public square and *secularity* in the

procedural sense which assures religious freedom and gives a voice to all minorities.

Similarly, the qualities of *individuality* need not be conflated with the *individualism*, which gives man no point of reference beyond his own ego and the gratification of his own individual desires. The expression of individuality, which is nothing more than the realisation and expression of the personal uniqueness of each human being, is not in opposition to the needs of the community. Quite the contrary, in an age of increasingly sterile conformity, uniformity and standardisation, the contribution of creative individuals who are realising their individual potential has never been needed more as a means of enriching and revitalising communities. *Communalism* will always suspect the individual of individualism, but a living *community* will respect and nurture individuality as a valid expression of diversity while being able to balance individual needs and modes of expression with collective rights.

The guiding principle in delineating the meaning of our terms, El-Affendi has suggested, should be balance; and we should remember, as the Qur'an tells us, that those who do not know are not equal to those who know and heed the warning of the Sacred Text not to follow our forefathers and classical scholars blindly. But under post-normal conditions, knowing itself is limited; or rather, it is intertwined with three varieties of ignorance – so wonderfully popularized by the great neo-liberal Donald Rumsfeld – known knowns, known unknowns and unknown unknowns (what we may call the Unthought). We need a whole array of different and multiple perspectives to counter these varieties of ignorance – rather than assume that those who know actually know anything! Moreover, we must assume that each perspective is valid within its own domains – in other words, it is a known known. But even here there are elements of ignorance that we may have to tackle. Reaching a balanced position on an issue is thus not as easy as it may appear. There is also the issue of distinguishing between balance and compromise, as Henzell-Thomas suggests and illustrates the distinction by comparing balance to moderation:

we might well understand it in its authentic Qur'anic sense (or indeed in Al-Ghazali's use of the concept of the golden mean as the ideal of human character) but we presumably would not want to accept it as meaning a dull compromise or in the sense it is often applied in public discourse and the media, where a 'moderate Muslim' is a good (not too religious) Muslim who is silent and invisible in the public square, effectively neutered and untroublesome.

Balance also becomes important in another respect. Muslim societies, notes Ibrahim, have become 'broadly' fragmented between orthodoxy and heterodoxy. 'I stress the word "broadly"', he says,

because it is not a bi-polar division in as much as there are varying shades of grey in between. At one end of the spectrum, we have the ultra-conservative traditionalists representing what they claim to be the "true" Islam. These are the Salafis that have over the years acquired semantic cognates such as Wahhabis, Fundamentalists, even Taliban and al-Qaeda (the latter are political movements but who is to say when religion ends and politics begins?) Then, of course, we now have the mother of all fundamentalists called ISIS with their brand of Islamic State for which I am sure they will cite chapter and verse for legitimacy. At the other end of the spectrum, we have the ultra-liberal progressives representing everything in diametric opposition to the other side. They reject the Shari'ah wholesale, regard the ahadith as pure fabrication and treat the Qur'an generally as just a Book of Parables and in the process there is a systemic breakdown in form and structure in matters of liturgy and worship, quite apart from the obvious collapse of articles of faith. Between these two extremes are the varying shades of grey and in the middle are the moderates. Indeed, I am using these labels arbitrarily. This is a subject that is not only worth pursuing further but, to my mind, has to be integrated into the discourse with a very clear agenda: how to bridge this chasm that continues to divide not just Muslims and non-Muslims but deeply among Muslims. In saying this, I am not suggesting that moral rectitude and ethical behaviour in education are irrelevant but that this

has to be seen in deed and action, not in proclamation of intentions.

Any worthwhile effort at reform must acknowledge and be aware of these distinctions. For it is through such a process – including semantic analysis of Islamic terms such as *khalifa*, *amanah*, and numerous others that we have not mentioned such as *shura*, *istislah*, *zulm*, *ahsan*, etc. – we will move forward to the pluralistic Qur'anic vision of unity within diversity. Plurality is not simply the acknowledgement of the mere existence of a diversity, or simply tolerating the Other, but following the injunction to 'know one another', 'to explore the best of all traditions through respectful co-existence, mutual recognition, active engagement, and transforming love', as Henzell-Thomas put it.

One term we did embrace is polylogue, used for a wide-ranging conversation involving different traditions, perspectives and viewpoints. It emphasises the fact that more than two (dialogue) voices, perspectives and positions are involved in the resolution of a complex problems; and that we need appreciate other 'truths', however unpalatable, other positions, even though they may be unpleasant to us, to arrive at a consensual position that can meaningfully be described as 'unity with diversity'. As Henzell-Thomas notes, 'polylogue is nothing if not about relationship. And I think it's so important to emphasize that this is not only about speaking but also about listening, a wide-ranging listening exercise'. Polylogues, to which we shall return shortly, are one way of handling the contradictions and dichotomies we constantly encounter.

CONTRADICTIONS AND DILEMMAS

It was repeatedly pointed out in our discussions that to build a solid conceptual framework for envisioning the reform of higher education, we need to resolve the fundamental dichotomies which consistently and persistently confront us such as tradition and modernity, text and context, stability and dynamism. The tree of reform should not only have its branches reaching into the sky, but also its roots firmly in the

ground. On tradition and modernity, for example, it was pointed out that we should take a balanced approach – both have good and bad points, and we need both. We should, for example, move beyond the traditionalist paradigm, so entrenched in Muslim societies, that regards modernity in total disdain; or to use the words of Henzell-Thomas, 'which harps on about the "myth of progress", the horrors of "individualism", "secularism" and "modernity", and sees all human history as a downward trajectory of cumulative entropy, by which man becomes further and further removed from his "primordial" and "pristine" nature'. But at the same time we need to acknowledge that modernity denigrates tradition, undermines the cultural heritage that sustains tradition, and seeks to replace tradition with modern secularism. Not surprisingly, the very social fabric of daily Muslim life in under threat of extinction. Similarly, we should not romanticize tradition and assume that everything based on tradition, or history and legacy, is by definition good. 'In search for an alternative paradigm with indigenous integrity', Henzell-Thomas argued, 'Muslims must channel the desire for some universality in Islamic values to establish the foundation of Islamic humanism, because it identifies something central to all humanity. Accordingly, the viability of the tradition rests upon its universal integrity that can affirm the belief that such a Muslim tradition is able to generate necessary confidence in its application and, at the same time, provide a model for expanded universal justification in conversation with secular or any other tradition that seeks Muslim attention'.

Henzell-Thomas furnished a short list of contradictions and dichotomies, with additions from Ibrahim, that we must wrestle with:

- Knowledge and Values
- Secularism and Religion
- Utilitarianism and Usefulness
- Quantity and Quality
- Relativism and Transcendent Reality
- Efficiency and Moral Excellence
- The Rational and the Animal

- Justice to one's Self and Injustice

Many of these dichotomies are related to each other. For example, the challenge of reconciling knowledge and values can also be conceptualized as the challenge of doing equal justice to efficiency and moral excellence or quantity and quality. But a basic point about contradictions, which often emerge in complex systems, is that they are by definition opposing, irreconcilable views, which cannot be revolved: they can only be transcended. In other words, contradictions have to be synthesized in a new position that incorporates most of the incongruous elements of different positions. As Henzell-Thomas explained: 'within the Western discipline of developmental psychology, K. Riegel identifies the ability to accept contradictions, constructive confrontations and asynchronies as the highest stage of cognitive development, and James Fowler associates dialectical thinking with the development of faith. It goes without saying that the dialectical process is not one either of compromise or loose relativism, but one of creative tension which ultimately transforms contradictions into complementarities, releasing the open-minded thinker from ingrained habits and conditioned patterns of thought, established affiliations, fear of change and instability, and reluctance to approach anything which may be threatening to one's sense of "self". False certainties derived from such conditioning are not the same as the "certitude" (*yaqin*) which Al-Ghazali sees as the product of "tasting" (*dhawq*) or direct experience'.

In our journey towards transcending contradictions and reaching 'the highest stage of cognitive development', we out to start with the biggest contradictions of all: the contradiction between 'Us' and the 'Others', so perceptively and well-articulated by Tayob.

It begins, as Tayob notes, 'with a neat division between what is called Islamic and what is called un-Islamic', and ends with the politics of identity. All historic attempts at reform of education, including that of the *Work Plan*, Tayob argues agree on the conception of identity:

> they see the self as distinct from the Other. The Other was identified
> as utterly different, either a source of threat or value. For some, the self

was threatened by an alien philosophy and humanity, which called for radical action in one form or another. For others, the self could benefit from the other. Generally, a politics of identity supported these projects. And that politics was founded and rooted on the self and Other that were basically different from and incommensurable with each other. There was very little common ground between self and Other: no common history, common values or common destiny.

This demonization and dehumanization of the Other – not just 'the West' but also Hindu India, indigenous cultures and languages, not just other sects but also other ways of knowing, indeed all other ways of being human – has been the dominant hallmark of Muslim thinking. Those who reject modern education, Tayob notes, see no value in the Other at all; some would happily kill the Other presumably to demonstrate the superiority of their own version of Islam! 'The list of Others', writes Tayob,

> keep on expanding – it begins with the *kuffar*, goes on to Shi'ites, but also then includes intimate allies who differ on minute issues. Those who support bifurcation also police the boundaries between self and Other on a continual basis. The irony and even tragedy, of course, lies in the fact that the unity of humanity would have been forgotten. And those who propose integration grapple with the underlying unity of the human condition, set against the particular self. They emphasize the value of the Other as a source of value – but not the other as Self.

Tayob suggests that meaningful reform requires a more inclusive and bolder approach to identity. Muslims often assume that they face unique problems and create research programmes and institutions that are exclusively suited for Muslims. This is a truncated approach to a complex, interconnected world. The problems of religion and secularism, as well as ethical and technological issues, that we witness in the West are also problems of Muslim societies – they are a mirror reflection of our own problems. The way religion has been turned into an instrument, for example, is not simply a problem of colonial history

and western societies, as many Muslim scholars have argued. Muslim societies too have turned religion into an instrument. An evaluation of religion, its meaning, values and worldview thus has to be a part of educational reform. Similarly, all the problems we face at global levels are also Muslim problems – they will affect Muslims as much as any other group of people on the planet. The new paradigms have to be based on the axioms that the self is not just reflected in the Other but is also a projection of the unintegrated self, or in Jungian terms, of the 'shadow', unexplored or unconscious aspects of the self, hence 'dark', and thus fuel for demonization of all those who are different from us. Thus, the major moral, ethical, political, social, scientific, technological and cultural challenges facing the world have to be an integral part of a programme of reform.

It is interesting to note that Tayob uses insights from Rumi to develop arguments similar to those in postnormal times theory which are based on analysis of trend extrapolations, complex emergent systems, chaos theory, foresight and futures studies. A clear indication that our heritage has a great deal to say to us and our epoch. Given that power is now shifting from the West, or as Tayob puts it, 'tomorrow is going on in India, Brazil, China', we need to develop partnerships with those 'who are worried about the future of humanity and about life on earth'.

RANKINGS AND FUTURES GENERATIONS

In the light of this synthesis of our deliberations and the overall analysis offered here, our discussion on university ranking appear rather superfluous. It is clearly not the case, as El-Affendi suggests that 'in established industrialised societies' most of the 'important debates about the overall general direction of society' have 'been resolved'. Rather these debates have resurfaced with increased vigor as a plethora of new books suggests; and the direction in which western societies are leading themselves, the rest of the world, and the planet is now being seen as detrimental to all life on Earth. This raises a number of questions on, to use Ibrahim's words, the 'glaring issue' of 'the

global rankings' where Muslim universities consistently do exceptionally badly. Thus, we need to do something to improve our ranking and catch up. But what are we catching up with? An already crumbling higher education system? A system that fragments knowledge, perpetuates disciplinary structures that justify the dominant paradigm, and that has generally contributed to the planetary crisis that we all face? Do we want to compete with this system on its own terms and within its paradigm so that our universities rise up on the ranking ladder? Would catching up with the 'quality of education' in the West in a world dominated by a monolithic paradigm of cultural domination eradicate a sense of cultural homelessness experienced by Muslim students? And where would we end up if we 'catch up'? In a place where, to use the words of Harry Lewis in *Excellence Without a Soul* (much cited in our discussions) colleges and universities are 'afraid to talk about truth, meaning, purpose and what it means to be human'; and where the 'ideal of a liberal education lives on in name only' and no one teaches 'the things that will free the human mind and spirit'. Of course, to eschew the ranking system does not mean that one is endorsing the existing state of affairs in higher educational institutions of the Muslim world. As repeatedly pointed out in our discussion, the quality of education in Muslim universities is exceptionally poor, there is no freedom of inquiry, and, as a consequence, most of our brighter students seek post-graduate studies in the West almost as a routine. We begin with acknowledgment of the current reality but take in critiques of western institutions because, as Henzell-Thomas states, they are 'important correctives to the assumption that the panacea for education in the Muslim world is the uncritical emulation of Western models, as if the main criterion for "success" in "catching up" amongst "lame-duck" Muslim institutions is improve-ment in their global ranking as defined by international ranking systems and criteria'. The point is how do we collectively – the West and the Muslim world – produce a new paradigm of education that not only promotes critical thought and the spirit of inquiry but also dares to talk about truth, meaning, purpose and what it means to be human in our complex and interconnected world.

There was a more enlightening discussion on inclusiveness and the young generation. El-Affendi hinted that our work should be empirically grounded, which presumably means we need to engage with the current cohort of students. In his response to El-Affendi, Henzell-Thomas was more explicit: 'we may need a guiding paradigm but it is concrete empirical engagement which will provide the evidence that will enable us to refine our provisional hypotheses through the ensuing process of dialectic. From my own point of view, that absolutely requires that I have some insight into what young people (men and women) have to say about their own experiences'. A basic maxim of futures studies, and hence all efforts at reform that are by nature future oriented, is that 'the young people themselves *are* the future' (the irony is that very little futures works actually incorporates futures generations). Reformers themselves never live to enjoy the fruits of their reforms (or experience the nightmares they may have unleashed). It is the next generation that has to deal with the reforms and take them forward. That is why it is essential that we not only bring young people in our discussion but make them an integral part of our overall project.

But to be truly inclusive we need to involve all potential stakeholders in our discussions; our 'empirical approach' should include, as Henzell-Thomas says, 'a wide-ranging listening exercise'. There are two basic reasons for this. One, if we are working on the basis of unity of life and humanity, it is obviously necessary that we have as many representatives of humanity as practically possible in our deliberations. Two, given that we are dealing with complex issues and situations, it is important to realize that we can only grasp their multifaceted dimensions through complex perspectives. In emergent complex systems, this is known as Ashby's Law of Requisite Variety: a complex system needs another complex system to understand and navigate it. In postnormal science research (PNS), where sophisticated scientific issues with complex ethical, social, cultural and environmental consequences are being analyzed, a mechanism called 'Extended Peer Community' is used. It involves wide ranging consultation with all those who may be affected by the outcome of science – including

critics who do not share the paradigm, journalists, protesters, environment activists, bloggers, clergy, business interests, housewives and lay people. In postnormal times theory we call it Polylogue, where experts, critics, feminists, students, young researchers and scholars, as well as layperson are consciously and deliberately chosen within a structured discussion to arrive at a pluralistic synthesis. Things do not change positively with an 'all-male cast of older men', when others, who probably have more at stake and certainly have as much to contribute, feel excluded. Positive, desirable change, we have learned during the last decades, is only ushered through inclusive, open and transparent deliberations. This means we have to consciously bring people of different backgrounds, ages, genders, sects, and perspectives into our meetings – and then provide them enough space to state their viewpoints. At the very least, we must nurture the young through a direct understanding of their needs, anxieties and aspirations. The lack of such respect and engagement with young voices is surely one of the main reasons for many of the problems besetting Muslim societies.

MOVING FORWARD

So what are we talking about when we are talking about reform of higher education? The answers that emerge from our deliberations so far can be stated in turning the 'awkward questions', asked by Henzell-Thomas at the end of his long commentary on El-Affendi's paper, into positive statements. We are talking about 'holistic education' in a more universal sense. Our goal is to create a new paradigm based on the first principles, as outlined in the *Work Plan*, where knowledge, creation, life and humanity are perceived as integrated within a universal framework. As such, we intend to go beyond the attachment to existing paradigms and models (which are usually inherently dichotomous and adversarial) in the realization that the way forward is a new mode of consciousness which is integrative and inclusive and involves embracing the Other. In this endeavor, we aim to guard against the degeneration of valuable concepts and critiques into crippling ideologies and fixed frames of thought – so as not

to repeat the mistakes of our predecessors. We aim to excavate the achievements of Islamic civilization, demonstrate their contemporary relevance, and differentiate them from archaism and nostalgia which characterize civilizational bankruptcy. We aim to balance critical thinking with ethical values. As we aim to be a beacon of excellence for all humankind, we are aware of the need for such a potentially transformational contribution to be couched in terms which are generally accessible to a wider audience. Hence, we conceive this as a contribution to educational development in all societies, whether Muslim or non-Muslim. But our more specific objective is to generate a thought process with which Muslims can think as Muslim and think their way out of the contemporary crises. We aim to initiate a process that will usher a revival of thought and spirit of inquiry in Muslim societies, shift Muslim societies away from a politics of identity towards aspirational values, encourage Muslim engagement with the contemporary world with all its complexity and contradictions, and create an informed citizenry fully equipped to take leadership role in the modern world.

Yet, we might make mistakes. But, at least, they will be new mistakes!

What do we need to do to achieve our vision?

We need to tackle the issue of reform in higher education from a number of different standpoints. We need empirical work as well as a theoretical analysis, including as Henzell-Thomas put it, 'systematic mapping of current discourses, philosophies and theoretical positions to inform the development of a paradigm rooted in empirical inquiry'. We need to revisit our philosophical and intellectual heritage and rediscover the ideas and notions that have contemporary relevance. We need to understand the fabric of modern knowledge production and appreciate the forces that are shaping the contemporary world: 'it is precisely by recognising and understanding the condition of the world at this particular time that the challenge of religious and cultural pluralism can be met', says Henzell-Thomas. We need to be

constantly on our guard against what might be called 'terminological entropy', that degradation and running down of meaning within conceptual vocabularies: 'this is not to give precedence to the temporal world over the spiritual world, nor to set one against the other, but to understand that human minds are conditioned differently in each age, and that tradition must be dynamically self-renewing and responsive to new conditions and new questions if it is to remain a living tradition'. We need to distinguish between disorientated intellectual curiosity (no matter how 'open-minded', 'original' and 'creative') and the intellectual endeavor grounded in the highest ethical and spiritual values which characterizes a truly great civilization. We need to be inclusive, involve young scholars, have more appropriate representations of gender and sects, and engage in wide-ranging listening exercises. And we need to explore the full range of methodologies by which the mind can be liberated from fixed frames of thought that are resistant to modification and change.

A more holistic picture emerges when we combine what we wish to achieve with what we need to achieve it. In essence, what we are saying is that the world is not just there to be talked about; it has to be brought into being based on the axiom and principles we cherish. And through the process of creating a new world we come to understand ourselves, our history, our relationship to each other and Others, and our place in relation to Others in the world. We are thus aiming to create a new discourse: a system of knowledge, new paradigms, concepts, terminology, canons, statements that have meaning for us, through which we deconstruct power and ideologies and engage and change the world.

The project conceived by the *Work Plan* thus now shifts gear and moves from 'Islamization of Knowledge' to become a discourse on 'Integration of Knowledge'. For the new, emerging discourse to become an on-going multi-generational endeavor, rather than simply a one-time effort, it needs a thriving discourse community that shares its axioms and principles, works collectively to develop and expand the discourse using its concepts and terminology and communicates its achievements and goals. One cannot exist without the other: this is

where we meet and resolve El-Affendi's 'circular problem': 'in order to generate new knowledge, we need viable institutions; but in order to have viable institutions, we need a new form of knowledge and knowledge-producing and knowledge-absorbing capacities. So where and how do we start?' We work from both ends simultaneously.

I propose we start with a network of discourse community which we build from the ground upwards. As the network – and hence the community – come together and develops, it will produce new knowledge, and the new knowledge will feed into the discourse and propel it. We need to create a formal, global network of individual scholars, intellectuals, postgraduate students, and activists who accept our premise that an 'Integration of Knowledge' discourse is urgently needed. It is important to realize that the members of the network cannot just be Muslims; we also need input from other cultures; and not just from the West but also from India, China and Latin America. Although in the initial stage, when the contours of the discourse are being established, it would probably be better for most of the members of the network to be Muslim. The network is 'formal' in the sense that its members are selected on the basis of certain criteria, it is coordinated and funded, all collectively work within the discourse, and everyone participates in sustaining and developing the discourse. The researchers work in groups, local or international, as – what in network theory is called – nodes. Each node, an interdisciplinary team, tackles specific topics within an overall framework – using the same terminology and concepts as the building blocks of their research. Each node selects its own Chair who is responsible for the work of the Node and communications with the coordinators. During the year, members of the network discuss their work and seek input from other nodes via digital technology. However, all the nodes are brought together once a year to present the fruits of their research, to be assessed and critiqued by their peers, and to set the agenda for the following year. The annual Conference, probably a week long affair, also serves as a training ground for future scholars with specific workshops and lectures on methodology, critical analysis of emerging issues, and challenges of the future. Every member has access to the

entire Integration of Knowledge project, its research output and its scholarly community. The output of the project is shared with Muslim and western institutions of higher education on a periodic basis to seek their views and criticism as well as to address their issues and concerns. The nodes eventually become El-Affendi's cherished 'Centres of Excellence', located in 'several locations in the Muslim world and in the West', but they focus not on social sciences but specific subjects that are an integral part of the 'Integration of Knowledge' discourse. Moreover, these centres are not imposed from the top, based on some plans that have been drawn, but evolved and mature organically to thriving sites of thought and knowledge production.

From our deliberations so far, we can identify four potential nodes that ought to be set up during the first phase of the project.

First, as Tayob has argued so forcefully, we need to begin with values, which mean we have to 're-open the questions raised first in theology (*kalam*) in reaction to the challenge of rationalism in the history of Islamic thought'. The first principles provide us with an overall framework of very general values but to go beyond into specific issues we need to work out what values we are actually talking about and promoting within what contexts. There is no fixed answer to the question 'what is goodness': a fresh water lake is good and provides a wholesome drink but the same lake becomes 'bad' when environment and other factors pollute its water. When Tayob asks, 'what values should be promoted in our contemporary world marked by science, capitalism, diversity, mediatisation and globalisation? What values should be promoted in educational institutions in relation to the Other as the enemy, the neighbour, the stranger and as the environment?', he is asking wicked questions that have complex answers, which may themselves change with new advances in science, the emergence of new technologies, shifts in the nature of capitalism, and as accelerating change transforms society and social relations. Even the question, 'are these values fully determined by revelation', requires a great deal of complex thought. Part of our problem is that philosophy has virtually disappeared from the Muslim world – which was one reason amongst others for the decline of Muslim civilization

-- and as a result we do not have a tradition of engaging with deep philosophical and ethical issues. Moreover, in a complex, interconnected, globalised world, often at the edge of chaos, it is not easy to determine, even for cultures with a vibrant philosophical tradition, what is good, better or best. The problem is pushed further into complexity in times of accelerating change when what is good may not actually remain good for long. So the problem will not be solved simply by looking back into *kalam* or the philosophical tradition of the Mutazalites or the Sufis. In some cases, we may find relevant and vibrant answers, as Tayob shows with Rumi. But the Great and Good of Muslim civilization did not solve all the problems of humanity; not all our contemporary questions of ethics and morality, which are deep, complex and have dynamic answers, can be discovered by interrogating our intellectual and spiritual heritage. Hence, we need to do both: revisit the philosophical heritage of Islam and develop a contemporary philosophical tradition of Islam, by engaging with contemporary philosophical trends of other traditions which are also struggling with complex issues of ethics and attempting to grapple with the moral and ethical issues we face today. Thus the accent has to be on the contemporary context and the group has to be truly interdisciplinary with representatives from other cultures.

Second, we need a node that works to deconstruct the definitional power of the modern knowledge system, including as Henzell-Thomas put it, 'systematic mapping of current discourses, philosophies and theoretical positions' and examines the current paradigm of knowledge and education in Muslim societies with the aim of producing alternative paradigms of knowledge formation. The goal is to produce alternatives that are more inclusive and humane but also rooted in both the intellectual history and tradition of Islam and the exploration of contemporary Muslim values carried out by the first node.

Third, the issues of legacy, heritage and our intellectual history have been raised again and again. For example, Sachedina asserts that 'Muslim thinkers must engage in retrieving the original impulse of Islamic tradition, namely, to seek different forms of intellectual and spiritual engagement of Islamic heritage in multi-faith societies'.

However, he limits the exercise to 'the long forgotten Islamic theological discourse that undergirded the renowned legal-ethical methodology' which 'needs to be revived as a public religious discourse to increase the necessary applicability of theory to practice, of text to context and concrete space'. Of course, the 'public role of religion is not limited to public rituals that are performed individually as well as collectively'; but it cannot, surely, be limited to theology either. (I would venture to say that a great deal of our classical theology is part of our current problem). We need to see our heritage in all its sophisticated diversity – including the historical discourses on knowledge and its classification, philosophical debates and disputes, history and historiography, scientific and technological accomplishment, educational developments, city planning, environmental and ecological concerns, social and political criticism, art and literature, and other human accomplishments. In other words, we need to see the Muslim civilization as a human civilization – as, for example, portrayed by Marshall Hodgson, and not simply as a truncated entity obsessed with theological issues. We need a group of scholars, including of Islam and Islamic history but also historians and philosophers of science and technology, artists and novelists as well as literary critics and art historians, to produce a more coherent and integrated picture of our legacy as human achievements. Or, as Hodgson would put it, as universal 'world history' and not just as history of Islam. The function of this node is to provide relevant analysis of the legacy that feeds into nodes one and two.

Fourth, we need a group of sociologists, critics and futurists to work on contemporary trends – how they are affecting Muslim societies, changing social, economic and cultural behavior, and creating desires and aspirations – and explore their impact on future generations of Muslims. Meaningful work of reform can only be done with an eye to the future. The new paradigms we aim to evolve, the change we seek, can only occur in the future. We thus need to have some understanding of the kind of world we may find ourselves in ten, twenty years from now: what new arrangements of power will mean for Muslim societies, what new demands will confront Muslims cultures,

and what would Muslims need to survive an even more complex and interconnected world of the future. The exercise involves both: understanding the dynamics that are shaping the contemporary world and appreciating the forces of change that are ushering a more colonising or a more liberating future. And equally important: how do the different pieces of research come together in an overall discourse, and how will the new paradigm we are aiming to evolve fit the frameworks that alternative futures may produce. If one were to capture what we are aiming to do in one sentence, it would be: shaping a more viable future of Islam and Muslims and the world. Thus this node uses the outcomes of the first three nodes to develop a positive vision of Muslim societies and shapes policies, strategies and procedures that take us from here – the crisis ridden present – to there, a viable and thriving future.

While the four nodes have their own subject areas, they work in an interdisciplinary and integrated fashion to shape the new discourse of Integration of Knowledge. Of course, other subject areas for research and exploration, and with them new nodes, will emerge as we proceed with our work. But I would suggest that this is the bare minimum we need to initiate an Integration of Knowledge network and discourse community. A great deal of the work of the network can revolve around the re-launched *American Journal of Islamic Social Sciences*: a discourse community needs a journal which in turn becomes a platform around which the community evolves and matures. It would take time to find suitable scholars for our initial nodes; I would suggest that we allow at least two years to identify the individuals, seek their consent, and bring them together for an initiation conference.

However, the time in between is important for doing some ground work. There are three specific projects that need to be undertaken to ensure that the 'Integration of Knowledge' network has some basis to work from; and they should be initiated now.

1. To learn from recent history, and as El-Affendi says, to have some ideas about 'what went wrong', we need a critical study of the experiences of IIUM in Kuala Lumpur as well as other experiments

such as Turkey's Gülen Movement, which has established a string of universities, and numerous Ismaili initiatives spearheaded by the Agha Khan, who has established Chairs in various western universities, built institutions of higher education in Pakistan and elsewhere. The study can also examine successful experiments in related contexts (selected institutions in Singapore, India and South Korea, for example) where some relative success appears to have been achieved. This is a task that can be undertaken by a couple of researchers and can be done within a year.

2. We need every member of the network to use the same concepts and terminology, hence the same language, in developing the discourse. This requires a detailed lexicon of both English and Islamic terms and concepts to avoid confusion and distortion (by Muslims and non-Muslims), as well as to define them in our own specific way, give them a contemporary meaning, and incorporate them within the 'Integration of Knowledge' discourse. What, for example, do *we* mean by freedom, human rights, democracy, secularism and so on? What is the contemporary relevance of Islamic terms like *khalifa*, *shura*, *ijma*, *istislah*, or *ihsan*? The physicist Niels Bohr once told his colleague: 'No, no, you're not thinking; you are just being logical'. This is because we don't just think logically; we also think with and through concepts. Terms and concepts are the basic building block through which a worldview is shaped and which shape the world. Raymond Williams knew this well: his *Keywords*, not only developed, as the subtitle suggests, *A Vocabulary for Culture and Society* but laid the foundations of the disciplines of cultural studies, media studies, postcolonial studies and had a major influence on the emergence of postmodernism. Thus we need more than a glossary or a dictionary. The lexicon has to be an exploration of the changing meaning of terms and concepts, a historical and moral critique, and an attempt at contemporary formulation that has meaning within our first principles – a tool for developing a more nuanced understanding of indispensable terms and concepts that

become the building blocks of the Integration of Knowledge discourse. It function is to lay the foundation of a new integrative and inclusive 'mode of consciousness' that move us towards the new paradigm. It is a task that can be performed by a single scholar, with expertise in linguistics; but the lexicon has to discussed, debated and critiqued by a collective for it to be widely accepted.

3. To ensure that all the members of the 'Integration of Knowledge' network are aware of the essential works of our intellectual and literary legacy, as well as to infuse an appreciation of our rich heritage in the young generation, we need a text on the Muslim canons. These are works of universal significance, produced within an Islamic purview that we need to read and re-read, over and over again. The canons serve as repository of our memory: they do not only enlighten us about the past but also provide hope for the future. Therefore, we need something more than a mere list of authors of the canons – we also need to know something about their universal and timeless content as well as their contemporary significance. What do they say to us *now*? At this juncture, it is interesting to note the impact Harold Bloom's *The Western Canon* had on the academia. It was deliberately produced at a time when questions began to be raised about the status and use of the corpus of mostly American philosophical and literary texts that had to be read by undergraduates – not just in the US but almost everywhere. Multiculturalism was in vogue and issues about world literature and philosophical traditions of the non-West had come to the fore; and demands were being raised that non-western classics should also be taught in western universities. Indeed, many institutions were changing their curriculum. Bloom's work was a product of his concern that the philosophical ideals, historical accomplishments, and literary classics of Western civilization were being abandoned. But it was not just a question of what the students should read but also, more importantly, an issue of power. Almost single-handedly he corrected the course and brought everyone into alignment! Twenty years later, the

emerging shifts in global power are once again transforming the shape of culture, art and literature and the way they are conceived and studied. So it is an opportune moment to produce a volume that provides an integrated perspective on Muslim canons, demonstrates their universal significance, ensures that members of the 'Integration of Knowledge' network are aware of them, and encourages students to read and engage with them. Bloom toiled for years on his volume; but this project can be accomplished within a couple of years by an interdisciplinary team of scholars.

4. It has been emphasized repeatedly in our deliberations that we should listen to the young and bring them into our discussions. Steps have already been taken towards this goal and our future meetings and conferences are planned to coincide with the Summer Schools organized by IIIT in Istanbul, Sarajevo and other places. Participants from both meetings can engage with each other and the young scholars could be brought in to take part in our debates as equals. However, we should also take a more specific step: commission an 'age cohort' study to discover the problems, needs, anxieties, aspirations, and hopes of this generation, and see what kinds of values and concerns they will bring with them regarding higher education when they move into positions of power and influence in a decade or so. It need not be an elaborate exercise, although it can be. A structured survey of a representative population should do the job!

The king is dead: 'Islamization of Knowledge', like most ideas, has moved on. It was a product of its time and context. But it has left a legacy: not least in articulating concerns about the dire state of Muslim thought and education, drawing attention to the Eurocentric nature of social sciences and enunciating the first principles. We move forward with 'Integration of Knowledge'. Long live the king. We hope that the new king is suitably attired.

NOTES AND REFERENCES

Quotations from Abdelwahab El-Affendi, Abdulkader Tayob, Abdulaziz Sachedina and Anwar Ibrahim are taken from their contributions to 8th October 2014 IIIT meetings on 'Reform in Higher Edcuation': Abdelwahab El-Affendi, 'The Reconfiguration of Muslim Higher Education: Some Points for Reflection'; Abdulkader Tayob, 'Identity and Islamic Educational Reform', Abdulaziz Sachedina, 'Reform of Education in the Muslim World'; and Anwar Ibrahim, 'Reflections on Abdelwahab El-Affendi's "The Reconfiguration of Muslim Higher Education: Some Points for Reflection" and Jeremy Henzell-Thomas's 'Comments'. Citations from Jeremy Henzell-Thomas are from his extensive email comments.

The Indian spokesmans words were reported by Benjamin Franklin, 'Remarks concerning the savages of North America', London, 1784; quoted by Thomas Lambo, 'Relevance of Western education to developing countries' *Teilhard Review* 2 (1) pp.2-4 (1976).

Ismail Raji al Faruqi, *Islamization of Knowledge: General Principles and Workplan*, (Herndon, Virginia: International Institute of Islamic Thought, 1982); my quotes are from the second edition, 1989. Also mentioned is AbdulHamid AbuSulayman's occasional paper 'Revitalizing Higher Education in the Muslim World' (IIIT February, 2007).

The 2003 *Arab Human Development Report: Building a Knowledge Society* (New York: UNDP, 2003).

On disciplines see Vinay Lal, 'Unhitching the disciplines: history and the social sciences in the new millennium' *Futures* 34 (1) pp.1-14 2002; Vinay Lal, *Empire of Knowledge* (London: Pluto Press, 2002); and Ziauddin Sardar, 'Development and the Location of Eurocentrism' in Ronaldo Munck and Denis O'Hearn (editors) *Critical Holism: (Re)Thinking Development* (London: Zed Books, 1998).

On the current crisis of thought, paradigms and disciplines see James Galbraith, *End of Normal: The Great Crisis and the Future of Growth* (New York: Simon and Schuster, 2014); Susan Greenfield, *Mind Change* (London: Rider, 2014); Michael Harris, *The End of*

Absence: Reclaiming What We've Lost in a World of Constant Connection (New York: Current, 2014); David Harvey, *Seventeen Contradictions and the End of Capitalism* (London: Profile Books, 2014); Richard Heinberg, *The End of Growth: Adapting to Our New Economic Reality* (West Sussex: Clairview Books, 2011); Henry Kissinger, *World Order: Reflections on the Character of Nations and the Course of History* (London: Allan Lane, 2014); Elizabeth Kolbert, *The Sixth Extinction* (London: Bloomsbury, 2014); Michael Lewis, *Flash Boys* (London: Allan Lane, 2014); Evgeny Morozov, *To Save Everything Click Here* (London: Penguin, 2013); Naomi Klein, *This Changes Everything* (New York: Simon and Schuster, 2014); Slaughter, Richard, *The Biggest Wakeup Call in History* (Brisbane: Foresight International, 2011); and, of course, Thomas Piketty *Capital in the Twenty-First Century*, translated by Arthur Goldhammer (Boston: The Belknap Press, 2014).

On the crisis of higher education in Europe see Adrian Curaj et al., editors, *European Higher Education at the Crossroads*, 2 volumes (Heidelberg: Springer, 2012).

On postnormal times, see Ziauddin Sardar, 'Welcome to Postnormal Times' *Futures* 42 (5) pp.435-444, (2010); Ziauddin Sardar, 'Postnormal Times Revisited' *Futures* 67 (March) pp.26-39, (2015); Ziauddin Sardar, 'The Future of Arab Spring in Postnormal Times' *American Journal of Islamic Social Sciences* 30 pp.125-136 Fall (2013); John Sweeney, 'Signs of Postnormal Times' *East West Affairs* 1 (3-4) pp.5-12 (2013); Jordi Serra, 'Post-normal Governance' *East-West Affairs*, October, pp.5-13 (2014); and the special issue of Futures on 'Postnormal Times' edited by Merry Wyn Davies: *Futures* 43 (2) pp.136-227 (2011). There is a vast literature on postnormal science, see, for example, Ravetz, J. R. and Funtowicz, S. O. (1994), 'Emergent complex systems' *Futures* 26 (6) pp.568-582; Ravetz, J. R. and Funtowicz, S. O. (1999), 'Postnormal science: an insight now maturing' *Futures* 31 (7) pp.641-646; Jerry Ravetz (2004), 'The post-normal science of precaution' *Futures* 36 (3) pp.347-357; and Ravetz, J. R. (2013) 'The Structure of Science in Postnormal Age', *East-West Affairs* 3rd-4th July.

On how the future is studied and explored, see Ziauddin Sardar, *Future: All That Matters* (Hodder and Stoughton, London, 2013). On the polylogue, see 'Beyond difference: cultural relations in a new century', the British Council 70th Anniversary Lecture where the concept was first introduced, in *How Do You Know: Reading Ziauddin Sardar on Islam, Science and Cultural Relations* selected, introduced and edited by Ehsan Masood (London: Pluto Press, 2006).

Garry Jacob, 'Towards a new paradigm in education' *Cadmus* 2 (2) pp.116-125 (2014) and Garry Jacobs, Winston P. Nagan and Alberto Zucconi, 'Unification of social sciences: search for science of society' *Cadmus* 2 (3) (2014) are available online from www.cadmus journal.org

On the question of language see Ludwig Wittgenstein, *Philosophical Investigations* 18 (Oxford: Blackwell, 1953); Ziauddin Sardar, *The Language of Equality* (London: Equality and Human Rights Commission, 2008); and Jeremy Henzell-Thomas, Foreword to *Wholeness and Holiness in Education: An Islamic Perspective* by Zahra Al Zeera (London: International Institute for Islamic Thought, 2001); Jeremy Henzell-Thomas, Epilogue to Ahmed Moustafa and Stefan Sperl, *The Cosmic Script: Sacred Geometry and the Science of Arabic Penmanship* (Inner Traditions International, forthcoming October, 2014); Jeremy Henzell-Thomas, 'Beyond the Tower of Babel: A Linguistic Approach to Clarifying Key Concepts in Islamic Pluralism' in *Citizenship, Security and Democracy: Muslim Engagement with the West*, ed. Wanda Krause (Richmond: AMSS UK, 2009); Jeremy Henzell-Thomas, 'The Challenge of Pluralism and the Middle Way of Islam', in *Islam and Global Dialogue: Religious Pluralism and the Pursuit of Peace*, edited by Roger Boase (Aldershot: Ashgate, 2005); and Jeremy Henzell-Thomas, 'The Power of Words and Images'. Paper presented at a conference on *Acknowledging a Shared Past to Build a Shared Future: Rethinking Muslim and Non-Muslim Relations* jointly convened by the British Council and the Centre of Islamic Studies at the University of Cambridge, March 29th-31st, 2012.

Other works cited include: Harry Lewis, *Excellence Without a Soul* (New York: Public Affairs, 2007); Jean Gebser, *The Ever-Present*

Origin, authorized translation by Noel Barstad with Algis Mickunas (Athens: University of Ohio Press, 1985, 1991); J. W. Fowler, *Stages of Faith: The Psychology of Human Development and the Quest for Meaning* (San Francisco: Harper and Row, 1981); Michel Foucault, *The Order of Things: Archaeology of the Human Sciences* (London: Routledge, 2001), 2nd edition; Marshall Hodgson, *The Venture of Islam* (Chicago: Chicago University Press, 1974), four volumes, new edition, 1977; and Marshall Hodgson, *Rethinking History* (Cambridge: Cambridge University Press, 1993); and the *Isaiah Berlin* quote is from *The Crooked Timber of Humanity* (London: John Murray, 1959) p.1.

JEREMY HENZELL-THOMAS

The Integration We Seek

WHAT ROUTE should we take through the landscape of higher education, in particular within Muslim societies? As a keen country walker, given to long-distance trekking in a range of 'wilderness' environments, I might suggest that we approach this task as another arduous trek, setting out to cover as much ground as possible in all weathers and take in every conceivable vista on the way.

As such, I might attempt a survey, ranging over as many views and perspectives as we could hope to encompass, taking in and trying to synthesize as much evidence and analysis as possible. One could usefully begin with the essays published in *Critical Muslim*, 'Educational Reform' (issue 15, 2015). Marodsilton Muborakshoeva, for example, explores the evolution of 'Universities in Muslim Contexts'. 'The early Muslims', she writes, 'actively sought to harmonise the message of Islam not only with their existing cultures but also with earlier civilisations'. The institutions of higher learning that developed in the classical period, such as Al-Azhar in Cairo, Al-Qarawiyin in Fez, and Al-Zaytuna in Tunis, had 'unique architecture, funding structure and organisation of knowledge and also introduced degrees (*ijaza*) and academic rankings'. Their approach to knowledge was holistic; and they became 'the prototypes on which the Christians of

Europe modelled their own universities'. But that is history. Modern universities in the Muslim world, Muborakshoeva notes, 'lack creative and original approaches to knowledge acquisition and production, and 'have very little to contribute either in the field of scientific and technological advancement or in cultural and religious studies'. The same point is emphasized by Martin Rose in his meticulous survey of universities in North Africa. Egypt, Libya, Algeria, Tunisia and Morocco 'have been amongst the biggest spenders in the world, fairly consistently putting some 5 percent of GDP and about 20 percent of government spending into education over the last half-century'. Yet, the returns, laments Rose, are 'slender'.

Taking other routes, I could venture into the controversial territory of the madrasas. As *What is a Madrasa?* by Ebrahim Moosa, and the Symposium based on the book in *Critical Muslim* (issue 15) shows, the landscape has changed drastically and is now overwhelmed by undergrowth, bogs and perilous situations on and off the path. I might baulk at the desolate panorama before me and take this as incontrovertible evidence of the urgent need for reform, as urged by Abdelwahab El-Affendi. Or I could critically examine the competing models and paradigms which purport to define the nature and purpose of a university education.

All of this is invaluable. I would like to approach this task not as a surveyor charting the territory, or even as a trekker with his eye on the map seeking a way out of the quagmire, but as an explorer searching for new vistas.

So let me begin with a story.

THE SHADES OF MEANING

In his study of the Native American worldview, physicist F. David Peat (1994) maintains that the natural tendency in Western culture is to warn, help, teach, instruct and improve instead of allowing people to learn from their experience. Under the heading 'A Story about Knowledge and Knowing', he relates a story told by Joe Couture, a therapist and traditional healer, which explores the implications of

these two ways of knowing and the clash between a Western education and his own Blackfoot background. The story shows how traditional people teach by telling stories rooted in their concrete experiences rather than by imparting facts or applying abstract logical reasoning. In this case a Native Elder, describing the experience of his grandson at a local school, felt no need to analyze the school's educational philosophy nor discuss the comparative value of different worldviews. He simply told a story which brought into focus some of the things that people were sensing and feeling about the impact of the school on the local community.

The story the Elder told was about the time when he was a boy and had to make a long trip along the Yukon River to Dawson City. His old pickup truck had broken down and he had faced an arduous journey of over a hundred miles in adverse conditions. In the end he had made it through. The old man said that his grandson could now read and write, but he had no doubt that if the boy were to attempt the same journey alone he would never make it back.

As an immediate reaction, and without proper regard for evidence of this kind, we might easily dismiss both stories as largely irrelevant. After all, you might say, what need is there in the modern world for the preservation of a culture so dependent on the manly skills of running, living in the woods, and fighting, even if we might agree that the other skill so prized by the Indians of the Six Nations – that of counselling – is very much in demand, especially in modern societies beset with increasingly prevalent and pressing mental health problems. And how often is the need going to arise for the skills which require a boy to travel a hundred miles in rugged country in adverse conditions in order to get home? These days, children rarely even walk to school, so perilous is such a journey considered to be by their parents.

Sardar's commentary on the Six Nations anecdote in Chapter 2 (*Islamization to Integration of Knowledge*, pp.96-98) encapsulates the underlying paradox which forms the crux of the problem before us, not only in the specific domain of education, but also in the wider field of paradigm change and its impact on the rise and fall of civilizations. Sardar contends that the anecdote also points towards a

predicament. While the Indians were right to judge that the new ways of knowing were not appropriate for their society at the time, this choice did nothing to preserve their cultures or save them from catastrophic decline. The Indians, like the Muslims who followed a similar path later on, did themselves no service by remaining ignorant for the power differential cemented by colonialism 'drove the former to extinction and the latter to subjugation'. In order to confront this fundamental paradox, asserts Sardar, we need to balance the other side of the equation and face up to the fact that our spiritual and ethical values cannot survive without the power to protect our societies from subjugation. And he comes to the inescapable conclusion that it is therefore incumbent on Muslim societies 'to appreciate and achieve a degree of excellence in contemporary knowledge'.

The analysis highlights the pivotal concepts that guide us to the new vista we need to open up. It needs to be a view which can take in both a broad panoramic vision, seeing on all sides and far into the distance, and a depth of field which gives us sharp focus when we need it. To do so, we need, above all, to understand that there are different though complementary levels of description in a multi-layered and multi-faceted reality where the diversity of forms is infinite and ever-changing, but which, nevertheless, has an origin and a centre, an immutable essence which is the source of everything and where all diversity and multiplicity find ultimate unity and reconciliation.

To encompass this unity in diversity within the field of education, we need to critically examine (and, ideally, clear away) the massive impediment caused by the human tendency to divide reality into competing and mutually exclusive ideas, approaches, and paradigms of thought which generate and sustain adversarial positions. Of course, this tendency is ingrained in us in the domain of duality, for, as the Qur'an tells us, 'everything have We created in pairs' (51:49). In an essay on the power of education in *Critical Muslim*, 'Power' (issue 14), I suggested that binary thinking and dichotomization are embedded in us as one of the chief features of the simple 'narrative' or 'script' which gives us the means to judge and act quickly and deci-sively. 'Us' and 'them' is a powerful call to incite action, judgement,

and hostility. By contrast, the armchair philosopher who scrutinizes the logical minutiae of every proposition, absorbs every qualification, respects every position, seeks out every iota of evidence, and agonizes over every minor dissonance and nuance may never get out of his chair. This paralysis of indecision is of course the extreme of one end of the spectrum, just as the conditioned reflex of the instant opinion or ingrained prejudice lies at the other extreme, reflecting as it does our propensity for the 'narrative fallacy', the simple story that makes comforting sense of an increasingly complex world. It is well known, for example, that in times of economic stress, social decay, or wider civilizational decline, people will often blame 'immigrants' as the source of the endemic problems within their own society. Blaming the 'other' is a characteristically simple explanation which obviates the need for any serious self-examination.

But the dilemma represented by these two types of thinking is not confined to the extremes. The simplistic doctrine of the 'Clash of Civilisations' (Huntington, 1996) for example, is not generally perceived as extreme. On the contrary, despite Fred Halliday's (1997) description of its 'incendiary banalities' as 'pernicious' and typical of the 'broad-sweep' approach which is 'careless with facts, ignorant of history and indifferent to the whole range of social theory that has, with due care, looked at such issues as culture, socialisation and tradition', its central fallacies are tenaciously clung to within a broad swathe of public opinion, the political and think tank culture, and the media. All of these give us regular object lessons that demonstrate how vulnerable we are to rapid thinking, and how the dichotomization which is so often a key feature of such thinking can so easily tend to the norm and become habitual and mainstream.

It is worth examining the terms *dichotomization* and *dialectic*. While the former is often marshalled to divide reality by adopting a polarized and oppositional posture which rejects the 'other' and can find no commonality or convergence between competing positions, the latter ideally seeks to refine an existing position and advance knowledge and civilization through critical engagement with a range of evidence and a plurality of alternative perspectives, and through

open and respectful dialogue and polylogue with a wider community of interlocutors. I say, 'ideally' because 'discussion' in general is clearly a continuum. At one end, there is the polarized 'debate' in which each 'side' seeks to defend its 'position', proposing or opposing a 'motion', and relying as much (or more) on rhetoric as reasoned argument and evidence. As such, 'debate' may do little more than bolster the preference for dichotomization and cement an existing hypothesis or narrative. At the other end of the continuum lies an advanced mode of thought, the committed endeavor of 'dialectic', at once rigorously logical and openly relational.

The appeal of simple stories is also only too clear in the popularity and influence of the ethnocentric polemics of Samuel Huntington (1996), Niall Ferguson (2011) and Dinesh D'Souza (1995) in which any dissenting voice is dismissed as an agent of 'cultural relativism'. 'Relativism' is a useful bugbear of traditionalist ideologues and cultural supremacists suggesting both chronic disorientation and moral laxity. As Jacques Barzun (2001) has pointed out in his monumental survey of modern Western civilization, the bogey word *relativism* has become 'a cliché that stands for the cause of every laxity', and 'a slippery slope of cunning justifications and satanic whisperings, taking us further and further away from the certainty of eternal truths and absolute values'. But the root of the word 'relativism' might be more usefully seen as a continuum ranging from a value-free 'anything goes' mentality which may indeed be rootless in a negative sense, to a very positive ability to form 'relationship', whether with ideas or with people. A book about 'Civilisation' which has the subtitle *'The West and the Rest'* (Ferguson, 2011) clearly occupies a position which is unable to disentangle the semantics of 'relativism' from that of 'relationship'.

Another topical example of muddling different shades of meanings of the same word or its root is the use of the word *multiculturalism*. The word might refer to at least three different notions: first, the existence of plurality or diversity ('multiculturality'); second, the model of multiculturalism which promotes tolerance between separate communities within plural societies (sometimes referred to as 'plural

monoculturalism'); and third, pluralism as an active process of constructive engagement between different communities (sometimes called 'interculturalism'). While some might legitimately argue that social cohesion and the building of a shared narrative is not facilitated by mere tolerance between isolated encampments within society, it is profoundly misleading to suggest that multiculturalism in its critically important sense of active intercultural engagement is dead. Lack of care in distinguishing such concepts can have profoundly negative consequences not only for minority communities but also for wider society. It is also important to distinguish pluralism in its most creative sense (as an active truth-seeking encounter) from the *syncretism* which cobbles together bits and pieces of different traditions, promotes a kind of wishy-washy universalism, or serves up comforting platitudes about common ground at an interfaith breakfast.

Also of relevance is the problematic nature of the term *modernity* and the tendency of the 'traditionalist' outlook to apply a pejorative sense to everything modern. This conflation is often carried further in the equation of modernity with the so-called 'myth of progress' and the concomitant association of the 'secular' and 'relative' with the denial of immutable truths and absolute values. The term 'secular' comes from the Latin *saeculum*, which means 'this age' or 'the present time', and the concept refers to the condition of the world at this particular time or period or age. In early Christian texts it was used to refer to the temporal, as opposed to the spiritual, world.

It can be argued, however, that it is precisely by recognising and understanding the condition of the world at this particular time that we can meet the challenge of religious and cultural pluralism. This is not to give precedence to the temporal world over the spiritual world, nor to set one against the other, but to understand that human minds are conditioned differently in each age, and that tradition must be dynamically self-renewing and responsive to new conditions and new questions if it is to remain a living tradition. In other words, time, place and people cannot be ignored in the development of human understanding. As Richard Tarnas (1996) affirms, commenting on the 'epochal transformation' he believes the 'Western mind' is undergoing

at the present time, 'each generation must examine and think through again, from its own distinctive vantage point, the ideas that have shaped its understanding of the world'. Or, as Panjwani (2015) so succinctly states in the conclusion to his essay in *Critical Muslim* (issue 15), 'tradition cannot be inherited passively. Each generation must acquire it afresh and with labour'. And this imperative to inject fresh life into what has become moribund applies, of course, to all cultures and civilizations, including the grand project of the 'Enlightenment'. As Pankaj Mishra (2015) so incisively reminded us after the massacre of Charlie Hebdo's journalists in Paris, 'we may have to retrieve the Enlightenment, as much as religion, from its fundamentalists'. If, as Kant maintained, the Enlightenment is 'man's emergence from his self-imposed immaturity' then, as Mishra contends, 'this task and obligation is never fulfilled; it has to be continually renewed by every generation in ever-changing social and political conditions...The task for those who cherish freedom is to re-imagine it – through an ethos of criticism combined with compassion and ceaseless self-awareness – in our own irreversibly mixed and highly unequal societies and the larger inter-dependent world'. In a nutshell, 'we must move past the tired debate that pits the modern west against its backward other and recover the Enlightenment ideal of rigorous self-criticism'.

THE CIRCUMFERENCE OF INTEGRATION

In discussing the need for clear distinctions in the use of terminology, I introduced the phrase 'integral perspective' in considering how we might transform apparent opposition into complementarity and I would like to take the term 'integral' (and its relations 'integration' and 'integrity') as the key pointers to the new vista we need to open up. These words come from Latin *integer*, 'whole, complete, entire', and clearly relate also to the idea of 'holism' and its diverse reali-zations in the field of 'holistic education'. There is also an obvious connection with the principle of Divine Unity or Oneness (*tawhid*), and with the attempts to realize this principle in the domain of education through the 'Islamization of Knowledge'.

The work of the Swiss philosopher Jean Gebser (1985) in describing the structural changes or transformations in human consciousness over time is instructive. Basing his conclusions on evidence form a wide-ranging study of human endeavor, Gebser believed that humanity is at the stage of transition from the 'Mental' to the 'Integral' structure of consciousness. He described the deficient form of the 'Mental' structure as the value-free ontology of rational materialism, but upheld that this moribund structure could not be renewed through a return to 'values'; rather, a transition was needed to an 'Integral' mode of consciousness which was not fixated on dualistically opposed categories, one-sided perspectives, fixed frames, competing paradigms, and the like.

There is a clear intersection here between Gebser's 'Integral' mode of consciousness and the process of dialectic. Some development psychologists have described dialectic as the highest stage of cognitive development, encompassing the ability to accept contradictions, constructive confrontations, paradoxes, and asynchronies. This is not a process of compromise, loose relativism or evasive fudging of difficult issues, but one of creative tension which ultimately transforms contradictions into complementarities, releasing the open-minded thinker from ingrained habits and conditioned patterns of thought, established affiliations, fear of change and instability, false certainties, and reluctance to approach anything which may be threatening to one's sense of self.

Yet, the convergence between the dialectical process as an advanced mode of human thought and the idea of an emerging integral mode of consciousness is only partial. So in what sense is the idea of an integral perspective as an 'emerging consciousness' or, in Gebser's terms, transition to a new 'mental structure', different in important respects from dialectic? Let us take dialectic in its sense of a discourse between two or more people holding different points of view about a subject who wish to persuade others of the truth of their position or refine that truth through reasoned arguments and critical engagement with the arguments of others. This is the Socratic ideal which upholds dialectic as a means of persuasion which is immeasurably superior to

the rhetoric that manipulates emotionally or the sophistry that seduces by elevating oratory to an art form. This ideal has come down to us as one of the founding principles of Western civilization, and also converges in many ways with the culture of intellectual inquiry and knowledge exchange which distinguished Islam at the height of its cultural vigor. That culture provided a vehicle for the rediscovery and transmission of classical civilization, but it was of course much more than that. Indeed, as Muhammad Asad (1980) eloquently reminds us, it was the higher intellectual and spiritual impulse derived from the divinely revealed teachings of the Qu'ran which ignited that 'spirit of intellectual curiosity and independent inquiry', and which in turn 'penetrated in countless ways and by-ways into the mind of medieval Europe and gave rise to that revival of Western culture which we call the Renaissance, and thus became in the course of time largely responsible for the birth of what is described as the age of science: the age in which we are now living'.

No one need deny the benefits the 'age of science' has brought us (provided we distinguish it from *scientism*), nor the cumulative advancement of knowledge derived from rational argument, dialectic, critical thinking, logical analysis, intellectual inquiry and cross-cultural exchange. But the question remains as to the way in which any putative emerging 'integral' mode of consciousness can carry further the degree of synthesis which can be attained through a methodology based largely on analytical tools.

I suggest that the answer already lies in the concept of *tawhid*, and in what Sardar has described as the 'basic axioms of the worldview of Islam'. Referring to the 'Islamization of Knowledge' project he describes how, starting from the Unity of Allah, 'the first principle of Islam' in the *Work Plan* 'systematically leads us to the unity of creation (the cosmic order, and the interconnection of everything), the unity of knowledge, the unity of life (human existence as a sacred trust, *amanah*, from God, and the human being as trustee, *khalifah*, of the abode of our terrestrial journey), the unity of humanity, and finally the complementary nature of revelation and reason. Collectively, these axioms offer us an excellent framework both for the

pursuit of knowledge and for the reform of Muslim education'.

But, as Sardar goes on to say, the way forward within this over-arching framework of unity, is the 'reinvention' of the task, taking it forward from the 'Islamization' to the 'Integration' of knowledge'. As he argued so succinctly in an earlier critique of Islamization, 'Islamizing disciplines already infused with a materialistic metaphysics and western, secularist ethics is tantamount to a cosmetic epistemological face-lift and nothing more. At best, it would perpetuate the dichotomy of secular and Islamic knowledge' that the project was so keen to avoid.

With this fundamentally creative shift from Islamization to Integration, and its implications for a truly holistic education, I whole-heartedly concur, whether we describe it as 'reform', 'reinvention', or in other terms which have been used in recent literature, such as 'reconfiguration', 'revitalization', 'revivification', 're-envisioning', 'regeneration', 'transformation' or even 'revolution'. The need to 'reinvent' the task is a pressing one, because, as Sardar explains, any attempt at knowledge production that begins with the unifying axioms in the *Work Plan,* 'even though they are rooted in Islamic thought and worldview, is intrinsically universal. The first principles do not focus solely on Muslims or Muslim societies but on the whole of humanity'. Farid Panjwani (2015) reminds us that, while retaining their ideals and values, Muslims have worked with people of other faiths and cultures to engage with problems of their times, yet 'much of the literature on Islamic education contributes to widening the gap between Islam and the West. In depicting Western civilisation as deeply problematic, and an exclusivist "Islamic" approach as the solution, it creates dichotomies and mirrors the doctrine of the clash of civilisations'. Abdulkader Tayob (2015) takes up the insights of Rumi on the 'self and the other' to argue that it is 'time that Islamic education reform locates itself more clearly in comparative perspective'. Richard Pring (2015a), asking the question 'What is a University?' refers to John Henry Newman's vision of a university as 'a place of teaching universal knowledge' and John Stuart Mill's contention that a university was not essentially a place of professional

education 'teaching the knowledge required to fit men for some special mode of gaining their livelihood' but a place for creating 'capable and cultivated human beings'. Looking back to the early universities of the Muslim world in the tenth and eleventh centuries, Pring refers to the work of Muborakshoeva in describing their orientation towards 'universal knowledge' and 'the formulation of a world-view with a pluralistic concept of knowledge and epistemology, yet within the overall framework of revelation'.

The fourteenth century Andalusian philosopher and jurist Al-Shatibi, responding to the changing realities of his society in which power was shifting markedly from Muslims to Christians, taught that although individuals and communities may come from different cultures which have been shaped by particular and specific historical experiences, they all share certain universal and supra-historical principles and moral values which are not the sole property of any religion or cultural group. Nevertheless, specific formulation of such universal principles and values does not take place in a vacuum but is inevitably affected by the context provided by our particular experiences as historical beings. As a result, there is a constant need to challenge and examine the way such principles are formulated (and formalized), particularly when people with different customs continue to meet and interact.

In identifying the 'natural corollary' of the axioms underlying the *Work Plan*, Sardar contends that,

> human society and individuality cannot be properly understood in terms of modernity, postmodernism, secularism, positivism, reductionism, formalism and naturalism and numerous other "isms" that have brought us to the edge of chaos in the first place. Human beings are purposeful. We create social, economic, political and cultural institutions not just to meet certain needs, achieve certain objectives, but also to realize certain values. We pursue knowledge not only to acquire greater understanding and more effective action in the real world but also to promote certain principles that integrate knowledge with our cherished values, emphasize the interdependence of creation,

unite humanity, promote equity and justice, and preserve and enhance life.

BEYOND DICHOTOMIES

So let us return to the pressing question: in what sense, then, can an integral perspective take us further than the remedies which are so often advanced for the reform of higher education in Muslim societies? How can we expand our view beyond the dichotomy of seeing either 'Westernization' or 'Islamization' as a panacea? How can we go beyond the 'lame-duck' mentality which frames the answer only in terms of 'catching up' with Western models of knowledge production, professionalism, quality assurance, critical thinking, research, liberal arts, and all the other factors which seem to ensure the dominance of Western universities in global rankings? At the same time, how can we avoid the 'cosy corner' mentality which prefers to occupy a parochial corner in which everything which is not explicitly 'Islamicized' is seen as threatening or deviant? We need to be constantly on our guard against what might be called 'terminological entropy', that degradation and running down of meaning within conceptual vocabularies. Islamization, for example, is reduced and exteriorized to the idea that there should be 'Islamic bicycles', 'Islamic trains' or the like. I have encountered this mentality many times in my advocacy work for the greater involvement of Muslims in outdoor pursuits and the natural world, having been asked on more than one occasion where Muslims can participate in 'Islamic walking' as if this is some special type of walking distinct from the way in which other human beings walk. Ultimately, how can we create an educational culture which is a beacon of excellence for all humanity? At best, Muslim educators will do what catching up is needed, and this is no mean task, but at the same time, they will be fully aware of a more pressing and more sublime mission. Islamic civilization has more to offer the world than apologetic imitations of the worst aspects of utilitarian education systems, even if the best aspects of any system can serve to remind Muslims of what made their own civilization a great one. We need to

have the humility to realize that we can indeed reclaim and revive forgotten or stagnant aspects of Islamic tradition through dynamic contact with other intellectual and pedagogic traditions which have partially carried the underlying Qur'anic spirit of inquiry into the modern age.

But this 'reclamation' must be a truly creative process, and not the tedious harking back to the achievements of the golden age of Islamic civilization, that backward-looking nostalgia as an illusory compensation for the dearth of new ideas which Malik Bennabi (1954) saw as a sign of 'civilizational bankruptcy'. It must examine how the values and principles which gave rise to such a civilization can be renewed, re-interpreted and applied in the contemporary world. Bennabi's analysis concurs to some degree with the finding of Arnold Toynbee (1934-1961) in his monumental study of history that 'archaism' (persistent idealization of past glories) is one of the key signs of civilizational decay. While this renewal needs to tread carefully in avoiding the 'spectre of interpretive relativism', it must, above all, embrace *relationship* – with texts, non-fiction as well as fiction, with all humanity and human knowledge, with all creation and the cosmic order, and with God.

The Qur'an tells us, 'We have made you into nations and tribes so that you may come to know one another' (49:13).

And it is that saving grace of 'relationship' which is, for me, the heart of the matter. As we reach for an integral perspective, whether we conceive of it as an emerging consciousness, a shift to a new 'mental structure', or simply as a new paradigm, we need to see that this requires the totality of human faculties, 'the hearing, sight and hearts', which, as the Qur'an repeatedly reminds us, we have been endowed, and for which we have 'cause to be grateful' (16:78, 23:78, 46:26, 67:23). The stupendous range of our faculties encompasses all that makes us human: at the very least, the senses which enable us to learn by direct observation and experience; the language-based deliberative or rational faculties which enable us to think, inquire, analyze, define, discriminate, conceptualize, theorize, and argue (*fikr*, *'aql*); our capacity for memory; and the moral faculties which provide

a criterion (*furqan*) for distinguishing truth from falsehood and right from wrong. These alone, without yet attempting to explore the affective dimension of feeling, 'emotional intelligence' and empathy, nor those 'higher' faculties associated with spiritual consciousness, point to many of the key objectives of the educational process, including the incorporation of both knowledge and values.

Awareness of the totality of human faculties enables us to embark on a balanced critique of the state of higher education in all societies. Let us take a typical dichotomy, the idea that if knowledge is at risk in Muslim societies, so values are at risk in Western ones. Yet, there is no shortage of voices to tell us that both knowledge and values are being undermined in Western universities, despite the dominance of Anglophone institutions of higher learning in global rankings. Henry Giroux (2015), for instance, contends that 'higher education in America has been hijacked by the corporate elite'. He laments that 'public spheres that once offered at least the glimmer of progressive ideas, enlightened social policies, non-commodified values, and critical dialogue and exchange have been increasingly commercialized – or replaced by private spaces and corporate settings whose ultimate fidelity is to increasing profit margins'. At this time, he pleads, 'it is more crucial than ever to believe that the university is both a public trust and social good. At best, it is a critical institution infused with the promise of cultivating intellectual insight, the imagination, inquisitiveness, risk-taking, social responsibility and the struggle for justice'. It is not difficult to see Giroux's concerns as the products of a profound educational crisis within the wider educational system in the West.

The very concept of qualitative education designed to nurture the full extent of human potential has been usurped by dumbed-down, uninspiring, utilitarian regimes shackled to a narrow range of prescribed content and obsessed with quantitative evaluative approaches derived from an oppressive culture of target-driven managerialism which reduces human beings to conforming and performing cogs in the industrial machine. There are an array of faculties and virtues which it ought to be the business of universities to nurture and inspire, but

JEREMY HENZELL-THOMAS

which are being neglected even in universities which occupy the top
echelon in global rankings.

THE HOLISTIC UNIVERSITY

How then can we extend the function of a university as a 'critical
institution' to the cultivation not only of those conventional analytical
tools of rationality or 'critical thinking' (and their application in
professional development) but also far beyond a pragmatic and
utilitarian focus to the igniting of all those capacities and virtues
envisioned by so many contemporary educationalists and social and
cultural critics whose passionate voices seem often to be crying in the
wilderness? Let us repeat them: 'intellectual insight, the imagination,
inquisitiveness, risk-taking, social responsibility and the struggle for
justice' as well as the liberation of the human mind and spirit, the
search for deeper meaning and purpose, and a vision of what it means
to be a fully human being. And let us add creativity, independent
thinking, and, of course, that expansiveness and receptivity of the
open heart and mind which can listen as well as talk and reaches out
with real interest and deep courtesy to the 'other' not only through
dialogue and discussion, but also through transforming love. To them
we might add Ronald Barnett's (1990) insight that a genuine higher
learning is 'unsettling' in the sense of 'subverting the student's taken-
for-granted world', and 'disturbing because, ultimately, the student
comes to see that things could always be other than they are. A higher
education experience is not complete unless the student realizes that,
no matter how much effort is put in, or how much library research,
there are no final answers'. And Richard Pring (2015b) takes this
necessary subversion a stage further, asking whether higher education
must also confront and subvert 'the taken-for-granted world of others
– parents, governments and other stakeholders, and the settled
perceptions of those of us responsible for delivering it'.

I deliberately include the 'heart and mind' in my approach to the
extended range of faculties (and hence a truly integral perspective)
because it is the composite organ of 'mind-heart' (*fu'ad*) which is

indicated by those Qur'anic verses which exhort us to be grateful for the faculties with which we have been endowed. Muhammad Asad explains that this concept encompasses both intellect and feeling, and gives various translations of the term in different verses as 'minds', 'hearts' and 'knowledgeable hearts'. In the same way, the faculty of *'aql* (intellect) though often used to mean 'reason' in the sense of logical thinking is a multi-layered concept which, as Cyril Glassé (2001) points out, corresponds in its highest and metaphysical sense, as used in Islamic philosophy, to the *Intellect* or *nous*, as understood in Platonism and Neoplatonism. This is the transcendent Intellect, through which man is capable of the recognition of Reality. In the tradition of Orthodox Christianity it is the highest faculty in man, and through it, man knows God or the inner essence or principles (*logoi*) of created things by means of direct apprehension or spiritual perception. It dwells in the depth of the soul and constitutes the innermost aspect of the Heart, the organ of contemplation. Rumi distinguishes between the two senses in his typically concrete and metaphorical language by describing the 'intellect' as the 'husk' and the 'Intellect of the intellect' as the 'kernel'.

It is important also to realize that the multi-levelled conception of *'aql* not only encompasses both reason and spiritual intelligence, or rationality and intellection, but also includes a moral dimension, in much the same way as the conception of 'excellence' expressed in the Arabic word *husn* goes far beyond the sense of personal mastery or achievement in skill or knowledge but embraces virtue and goodness. Karim Crow (1999) has shown that one of the key components of the concept of 'intelligence' expressed by the term *'aql* was 'ethical-spiritual, teaching how to rectify one's integrity and to cause one's human impulses, faculties and latent powers to flourish, with the purified emotions promoting the operation of a higher intelligence'. Such an analysis converges usefully with modern advances in the field of cognitive psychology which question the conventional reduction of human intelligence to a single unitary or g factor for 'general intelligence' as measured by IQ tests, and point instead to 'multiple intelligences'. Gardner (2006) identifies seven of these: linguistic,

visual-spatial, logico-mathematical, body-kinesthetic, musical-rhythmic, interpersonal and intrapersonal. According to Crow, the combination of knowledge and understanding, and of emotional, social and moral intelligence, is also traditionally suggested by the term 'wisdom' and is manifested in 'personal integrity, conscience and effective behaviour'. Guy Claxton (1997) reports the case of people who work as handicappers at American racecourses who 'are able to make calculations, based on a highly intricate model involving as many as seven different variables, yet their ability to do so is completely unrelated to their IQ scores' (Ceci and Liker 1986).

The fact that it is the linguistic and logico-mathematical intelligences that are most prized in Western education systems partly reflects the dominant influence of Piaget in the field of developmental psychology. Piaget effectively demoted the intuitive, practical intelligence to the infantile level of 'sensorimotor intelligence' which is dominant during the first two years of life, to be superseded and transformed in due course by more powerful, abstract, intellectual ways of knowing – notably, the 'formal operations' of hypothetico-deductive thinking and theory construction. Claxton (1997) points out that there is an implicit assumption in Piaget's 'stage theory' of development that the highest form of intelligence is the operation of reason and logic, and his influence on several generations of educators has ensured that 'schools, even primary schools and kindergartens, saw their job as weaning children off their reliance on their senses and their intuition, and encouraging them to become deliberators and explainers as fast as possible'. Claxton labels this type of thinking as 'd-mode', that type of deliberate conscious thinking which works well when the problem it is facing is easily subject to generalization and neat conceptualization; is much more interested in finding unequivocal answers and solutions than in examining the presuppositions behind the questions, which may imply awkward complexities; assumes that the way it sees the situation is the way it is and does not easily see the fault may be in the way the situation is perceived or 'framed'; seeks and prefers clarity and precision through literal and explicit language, and neither likes nor values confusion or ambiguity; is purposeful and

effortful rather than playful and operates with a sense of urgency and impatience; and works well when tackling problems which can be treated as an assemblage of nameable parts and are therefore accessible to the function of language in atomising, segmenting and analysing.

In reclaiming its higher purposes from corporatization or any other corruption of its ideals, a higher education might embrace some of those advanced critical faculties and socially responsible virtues identified by Giroux and others, but how, for example is one to develop spiritual aspiration, even if the related faculties of will, intention and decision may be more typically associated with the 'effort' which is indispensable for intellectual development? How is one to teach contemplative reflection (*tafakkur*), or pondering the signs in creation (*tawassum*) which point (through the 'creative imagination' in its deepest sense) to the existence of the Creator, or spiritual attentiveness (*muraqaba*) by which one watches over and take care of one's soul or spiritual heart, a state of presence with God in which the aspirant leaves behind all other thoughts and concerns? How is one to teach *taqwa*, in its deepest sense of 'consciousness of God', or spiritual intuition, discernment (*firasa*) or insight (*basirah*)? Some of this might be on the curriculum in the form of 'meditation' in some schools (though even then often reduced to a 'tool' for relaxation, calmness, happiness, mindfulness for greater effectiveness, or some other 'useful' objective), or it might be touched on or evoked in receptive souls through 'nature education', or other holistic or creative activities, but how is it to be embedded in the specialized subject matter of a university course? Is it not something which might rather be nurtured through the totality of *tarbiyah*, that multi-faceted educational process which includes not only formal education but also what is learnt through family, friends, mentors, supplementary education, recreational activities, culture, and travel (even unto China)? Yet, it can also be argued that a good teacher should be not only a *mu'allim*, a transmitter of knowledge but also a *murabbi*, a nurturer of souls and developer of character.

But let us return to earth from the stratosphere, and to the vista we might hope to reach through educational reform founded on

integration of knowledge and values and the transforming power of relationship. Abdulkader Tayob (2015) points the way in his commentary on one of the discourses of Rumi, in which Mevlana turns his attention again and again to the pain and hurt felt in the encounter between the 'self and the other' and the breakdown in relations between them. As Tayob comments, Rumi turns away from 'a self that is antagonistic or set apart from the other' and 'directs the self to unity and union with the other'. This is not to deny the pain, 'the feeling of alienation and dependency that has struck a deep chord' in those engaged in Islamic educational reform in modern times. And as Tayob asserts, that pain should certainly 'not be replaced with an uncomplicated feeling of unity and universality. The pain of colonialism, the destruction of communities and livelihoods through rampant capitalism, and other dysfunctional systems in the modern world, cannot be denied'.

Yet Rumi's appreciation of both unity and multiplicity in the world, and his profound perception that 'the road to the self passes through the other', opens a path to modern educational reform which can transcend the attachment to distinction and difference we can see in the three major 'dispositions' identified by Tayob. Attachment to dichotomization is only too evident in the dispositions of anti-Western 'rejectionism' and the 'bifurcation' which led to the disconnection between religious and secular education, but Tayob also contends that it is also present in the third disposition represented chiefly by the 'Islamization' movement. Though ostensibly 'integrationist', this 'takes one step in the direction of universality and unity' only to 'retreat as quickly with another step towards distinction and difference'. In such a way, the approach of Islamization might be characterised as a false dawn, or a cul de sac which purports to lead to integration but which ultimately focuses only on the self and does not learn any lessons from the way in which 'the Other provides a perfect reflection of the self'. A point also indirectly made by Mohammad Nejatullah Siddiqi (2015) who after spending a life time working and researching 'Islamic economics', now concludes that both the 'theory and practice of Islamic economics and banking is flawed, full of anomalies, and have

basically failed as projects. All we can do is to congratulate ourselves on having re-invented capitalism by using Islamic jurisprudence!' To claim that Muslims are somehow immune from 'secularism, individualism, and ethical malaise' is to be in a state of denial, for the problems of politics, society and ethics clearly evident in the West, in the Other, 'call for serious examination in the self' and such problems offer a real starting point for educational reform. In the same way, and perhaps more pointedly, it is also an illusion for Muslims to claim that they are immune from the 'triviality, desolation and dysfunctionality' which the former Archbishop of Canterbury, Rowan Williams (2007), sees as increasingly evident in contemporary British society. And we might add here the searing question of Jesus in his Sermon on the Mount, asking why we behold the mote (speck) in our brother's eye but do not consider the beam in our own eye (Matthew 7:1-5). Also known as the 'Discourse on Judgmentalism', its succinct metaphor about the inter-relationship between self and other is also expressed in the language of modern 'depth' psychology in the concepts of 'shadow' and 'projection'. In denying the beam in our own eye, we unconsciously project it onto the other, in the same way as we project the ills of our own society onto immigrants, scapegoating and even demonising the 'alien'. In such a way, the other is perceived as 'dark', a projection of our own 'shadow', that nether region of the psyche which we fail to recognize in ourselves as part of our 'identity'. Numerous malignant outcomes of this unconsciousness might be mentioned, including the murderous rampages of Boko Haram and Anders Breivik, discussed by Sindre Bangstad (2015) in his article on Islamophobia in Norway, in their respective demonization either of the 'West' (Boko = Western books) or the 'multiculturalism' which raises for the xenophobes the hideous spectre of the 'Islamification' of Europe.

Tayob's conclusion that 'values' must take precedence over 'identity' in steering a new course towards the 'radical unity' needed for educational reform appears to contradict Gebser's belief that the 'moribund "Mental" structure' cannot be renewed through a return to 'values', but only through a transition to an 'Integral' mode of

consciousness. But both these insights are immensely valuable, and one way to move towards a resolution of any seeming contradictions is to take 'radical' in its sense of relating to the 'root' or origin, and not in its later subsidiary sense as referring to political activism or innovative reform and change. It is only too evident how terminological entropy has further truncated the term in its sense of 'radicalization' applied to extremists.

Being 'radical' in the sense of turning to one's origin is to avoid tunnel vision, neither facing narrowly to the front (seduced by the 'progressivism' which rejects all tradition) nor to the rear (incarcerated in regressive dogmatism or drowning in nostalgia for past times) but facing always to the Centre, which is the 'original point' indicated by the meaning of the word 'revolution'. In the same way we might refer to the root of the word 'identity'. Its original sense is best preserved in its derivative 'identical' which reflects the meaning of Latin *identitas*, literally 'sameness', derived from Latin *idem*, 'same'. There is a common 'identity' in all human beings residing in the primordial disposition or essential nature (*fitrah*) with which we have been divinely endowed. The word 'simple', derived from the Indo-European root meaning 'same' has the underlying sense 'same-fold' – that is, not multifarious. The semantic connection between what is simple and what is single is evident in the Latin word *simplus* ('single') derived from this root. The 'simple' person may therefore be seen in one sense as a 'single' undivided person, a person who is always 'the same', true to himself or herself. Simplicity in this sense is like a mirror which reflects the Divine Singularity at the core of every human being.

The relationship between the words 'origin' and 'orientation' can also be excavated from their common root. Both English words come from the same source, Latin *oriri* 'rise'. The verb 'orient' and its variant 'orientate' originally meant 'turn the face to the east', the direction of the rising sun. Orientation is an essential spiritual concept, whether exoterically in terms of physical direction (as in the *qibla*, the direction Muslims face in the ritual prayer, or facing east towards the altar for Christians) or esoterically as the light of God, 'neither of the East nor of the West' (24:35), the point of Unity within the Heart, the

dimensionless point at the Centre beyond duality and the play of the opposites. To face to the centre in this inward direction and to perceive that 'wherever you turn there is the face of God' (2:115) entails the constant remembrance of our origin, our point of arising, and our inevitable return: 'Verily, unto God do we belong and, verily, unto Him we shall return' (2:156).

In all of these semantic excavations, we might discern a primordial language which articulates the fundamental unity and interconnection at the root of everything that exists. That 'radical unity' in its deepest sense must be at the heart of the radical educational reform needed in all societies. Rooted in living relationship between the 'self and the other', our diverse identities, orientations and values find a common origin and centre which dissolves the rigid oppositions erected by dualism. As Sardar concludes, 'Islamization of Knowledge, like most ideas, has moved on. It was a product of its time and context. But it has left a legacy'. Its enunciation of first principles centred on Divine Unity (*tawhid*) stand as an enduring framework for educational reform. Now, we 'move forward' with 'Integration of Knowledge', to be sure, but also with that panoramic integral perspective which can only be encompassed by the totality of human faculties. This is the emerging consciousness which offers us hope for the future.

REFERENCES

An earlier version of this essay by Jeremy Henzell-Thomas was first published as the Introduction to *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst, 2015).

Al-Shatibi, Abu Ishaq. *Al-Muwafaqat* (Dawlat Al-Tunisia, four volumes, 1882).

Asad, Muhammad. 1980. *The Message of the Qur'an* (Gibraltar: Dar Al-Andalus, republished by Bath: The Book Foundation, 2004), p.vi.

Bangstad, Sindre. 2015. 'Researching Islamophobia in Norway'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.99-110.

Barnett, Ronald. 1990. *The Idea of Higher Education* (Buckingham: Open University Press and SRHE).

Barzun, Jacques. 2001. *From Dawn to Decadence. 1500 to the Present: 500 Years of Western Civilisation* (London: HarperCollins), pp.760-61.

Bennabi, Malik. 1954. *The Question of Culture* (republished by the Islamic Book Trust, 2003).

Ceci, S. J. and Liker, J. 1986. 'A day at the races: a study of IQ, expertise and cognitive complexity', *Journal of Experimental Psychology: General*, vol. 115, pp.255-266.

Claxton, Guy. 1997. *Hare Brain Tortoise Mind: Why Intelligence Increases When You Think Less* (London: Fourth Estate).

Crow, Karim Douglas. 1999. 'Between Wisdom and Reason: Aspects of 'Aql (Mind-Cognition) in Early Islam'. *Islamica*, 3:1.

D'Souza, Dinesh. 1995. *The End of Racism* (New York City: The Free Press).

El-Affendi, Abdelwahab. 2015. 'Thinking of Reconfiguration'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp. 49-58.

Ferguson, Niall. 2011. *Civilisation: The West and the Rest* (New York: Penguin Books).

Gardner, Howard. 2006. *Multiple Intelligences: New Horizons in Theory and Practice* (Basic Books).

Gebser, Jean. 1985. *The Ever-Present Origin*, authorized translation by Noel Barstad with Algis Mickunas (Athens: University of Ohio Press).

Giroux, Henry. 2015. 'Higher Education and the Politics of Disruption' dated 17/03/2015 at http://truth-out.org/news/item/29693-higher-education-and-the-politics-of-disruption (accessed 20/03/2015).

Glassé, Cyril. 2001. *The Concise Encyclopaedia of Islam* (London: Stacey International), p.55.

Goldman, Daniel. 1995. *Emotional Intelligence* (New York: Bantam).

Halliday, Fred. 1997. 'A new world myth', *New Statesman* (April), pp.42-43.

Henzell-Thomas, Jeremy. 2015. 'The Power of Education'. *Critical Muslim*, 'Power', issue 14, (London: Hurst), pp.65-86.

Huntington, Samuel. 1996. *The Clash of Civilisations and the Making of the New World Order* (New York: Simon and Schuster).

Kahneman, Daniel. 2012. *Thinking, Fast and Slow* (London: Penguin Books).

Lewis, Harry. 2007. *Excellence Without A Soul: Does Liberal Education Have a Future?* (PublicAffairs).

Mishra, Pankaj. 2015. 'After the Paris Attacks: It's time for a new Enlightenment'. *The Guardian*, January 20th.

Moosa, Ebrahim. 2015. *What is a Madrasa?* (Edinburgh: Edinburgh University Press), discussed in the Symposium in *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.213-241, with contributions by Iftikhar Malik, Shanon Shah, Mohammed Moussa and Merryl Wyn Davies.

Muborakshoeva, Marodsilton. 2015. 'Universities in Muslim Contexts'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.37-48.

Panjwani, Farid. 2015. 'Facing Muslim History'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.121-133. This paper updates and further develops ideas from his previous

paper, 'The "Islamic" in Islamic Education: Assessing the Discourse', *Current Issues in Comparative Education* 7:1 (2004).

Peat, F. David. 1994. *Blackfoot Physics: A Journey into the Native American Worldview* (London: Fourth Estate), p.57.

Pring, Richard. 2015a. 'What is a University?' *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.25-35.

Pring, Richard. 2015b. 'The Changing Nature of Universities: economic relevance, social inclusion or personal excellence?' at http://www.learning.ox.ac.uk/iaul/ProfPring.pdf (accessed 28/3/2015).

Rose, Martin. 2015. 'The Sheepskin Effect'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.73-87.

Rumi, Jalaluddin. *Mathnawi* III, pp.2527-2528 and IV, pp.1960-1968.

Sardar, Ziauddin. 2004. *Desperately Seeking Paradise: Journeys of a Sceptical Muslim* (London: Granta Books), pp.194-203.

Siddiqi, Nejatullah. 2015. 'My Life in Islamic Economics'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp. 143-158.

Taleb, Nassim Nicholas. 2007. *The Black Swan: The Impact of the Highly Improbable* (New York: Random House).

Tarnas, Richard. 1996. *The Passion of the Western Mind* (London: Pimlico), p.445.

Tayob, Abdulkader. 2015. 'Reforming Self and Other'. *Critical Muslim*, 'Educational Reform', issue 15, (London: Hurst), pp.59-73.

Toynbee, Arnold. 1934-1961. *A Study of History* in 12 volumes (Oxford University Press).

Williams, Rowan. 2007. 'Is our society broken? Yes, I think it is'. Daily Telegraph, September 17th.

JEREMY HENZELL-THOMAS

Towards a Language of Integration

I AM sure most of us know some version of the Biblical story of the
Tower of Babel from the Book of Genesis (11:1-9) and even those of
us who do not may be familiar with the metaphorical application of
the word 'Babel' to denote a confused medley of sounds or the din of
mutually incomprehensible speech.

Some of us, too, will be familiar with at least one of the many
depictions of the building of the Tower of Babel in Western art, of
which the two surviving oil paintings (c. 1563) by Pieter Bruegel the
Elder are perhaps the best known. Bruegel's depiction of the Tower is
deliberately modelled on the Roman Colosseum as a symbol of
overweening pride and arrogant self-confidence (Rome as the 'eternal
city' built to last forever). According to the Biblical account, the
Tower of Babel was erected by the descendants of Noah (Nuh) led by
Nimrod, King of Shinar, in a presumptuous attempt to reach up to
heaven. As a punishment for their hubris, God confounded them by
making the builders unable to understand each other's speech; hence,
according to legend, the 'confusion of tongues' – the fragmentation of
human speech into the various languages of the world – and the
scattering of mankind over the face of the earth.

The Qur'an, however, does not support the idea that the diversity

of languages and races is a punishment for presumption and vainglory, or an intolerable burden placed on mankind, a fall from monolithic identity and monolingual and monocultural purity and cohesion. On the contrary, it divinely ordains unity in diversity, not only in terms of culture, language and race, but also in religion. As Mahmoud Ayoub explains, 'Humanity began as one and must remain one, but it is unity in diversity. This diversity, moreover, is not due to the gradual degeneration of human society from an ideal or utopian state. Nor is it the result of a lack of divine guidance or human understanding. Rather, religious diversity is a normal human situation. It is the consequence of the diversity of human cultures, languages, races and different environments'. And in the words of Rabbi Abraham Heschel, 'Revelation is always an accommodation to the capacity of man. No two minds are alike, just as no two faces are alike. The voice of God reaches the spirit of man in a variety of ways, in a multiplicity of languages. One truth comes to expression in many ways of understanding'. The Prophet Muhammad himself is reported to have said: 'The diversity of my people is a blessing' (*ikhtilaf ummati rahmah*).

The key verses in the Qur'an which uphold pluralism and the value of diversity are well known, but cannot be repeated enough:

> And among his wonders is the creation of the heavens and the earth, and the diversity of your tongues and colours: for in this, behold, there are signs indeed for all who are endowed with knowledge! (30:22); And never have We sent forth any apostle other than in his own people's tongue, so that he might make the truth clear unto them (14:4); Unto every one of you have We appointed a [different] law and way of life. And if God had so willed, He could surely have made you all one single community: but He willed it otherwise in order to test you... Vie, then, with one another in doing good works! (5:48); We have made you into nations and tribes so that you may come to know one another (49:13).

Ziauddin Sardar, commenting on two of these verses, adds that 'the diversity of human languages, cultures, races and nations is part

of the intention of creation' and Muhammad Asad notes other verses which uphold that, in his words, 'the unceasing differentiation in men's views and ideas is not incidental but represents a God-willed, basic factor of human existence'. In short, the Qur'an tells us that diversity is a gift, an element of man's primordial condition, a sign for the intelligent, an opportunity to know one another and to vie with one another in doing good works.

In his discussion of 'Adam to *Confusio Linguarum*', Umberto Eco refers to Jürgen Trabant's view of the story of the Tower of Babel:

> This story is a gesture of propaganda, in so far as it provided a partic-
> ular explanation of the origin and variety of languages, by presenting
> it *only* as a punishment and a curse. Since the variety of tongues renders
> a universal communication among men, to say the least, difficult, it
> was certainly a punishment. However, it also meant an improvement
> of the original creative powers of Adam, a proliferation of that force
> which allowed the production of names by virtue of divine inspiration.

Reflecting on the Qur'anic manifesto of religious pluralism, Khalid Abou El Fadl makes the important point that,

> the classical commentators on the Qur'an did not fully explore the
> implications of this sanctioning of diversity, or the role of peaceful
> conflict resolution in perpetuating the type of social interaction that
> would result in people 'knowing each other'. Nor does the Qur'an
> provide specific rules or instructions about how 'diverse nations and
> tribes' are to acquire such knowledge. In fact, the existence of diversity
> as a primary purpose of creation…remained underdeveloped in Islamic
> theology. Pre-modern Muslim scholars did not have a strong incentive
> to explore the meaning and implication of the Qur'anic endorsement
> of diversity and cross-cultural intercourse. This is partly because of
> the political dominance and superiority of the Islamic civilisation,
> which left Muslim scholars with a sense of self-sufficient confidence.
> Nevertheless, it is fair to say that the Islamic civilisation was pluralistic
> and unusually tolerant of various social and religious denominations.

> Working out the implications of a commitment to human diversity
> and mutual knowledge under contemporary conditions requires moral
> reflection and attention to historical circumstance – precisely what is
> missing from puritan theology and doctrine.

THE EXPANDING HORIZONS OF HUMAN KNOWLEDGE

The golden opportunity for the advancement of knowledge and
understanding bestowed by diversity is also implied in the symbolism
of the Pen in the Qur'an. Commenting on the first verses of the Qur'an
to be revealed – 'Read in the name of thy Sustainer, who has created
– created man out of a germ-cell! Read – for thy Sustainer is the Most
Bountiful One who has taught man the use of the pen, taught man
what he did not know!' (96:1-5) – Muhammad Asad notes that the
pen, the use of which has been taught to man by God, 'is a symbol for
all knowledge recorded by means of writing. Man's unique ability to
transmit, by means of written records, his thoughts, experiences, and
insights from individual to individual, from generation to generation,
and from one cultural environment to another endows all human
knowledge with a cumulative character; and since, thanks to this God-
given ability, every human being partakes, in one way or another, in
mankind's continuous accumulation of knowledge. As Sardar suc-
cinctly puts it: 'We are created with the capacity to be knowledgeable
beings with the ability to learn. Learning and knowledge are by their
very nature cumulative, so I take it as axiomatic that we have the
potential as well as the responsibility to progress in understanding'.

And this advancement is also dependent to a large degree on a
variety of sources and strands of human knowledge and their exchange,
confluence and synergy in the development of human civilization. A
striking historical example is the invention of the Proportioned Script
by the vizier and master scribe Ibn Muqla in 10th century Baghdad.
Why did three centuries have to elapse after the death of the Prophet
of Islam before the advent of a 'prophet of handwriting' (Ibn Muqla)
whose legacy in providing the geometrical foundation for the
construction of the Arabic letter shapes would determine what has

ever since been regarded as the acme of penmanship, the finest manner of committing the sacred text of the Qur'an to writing? Ahmed Moustafa and Stefan Sperl provide the answer: 'The invention of the Proportioned Script had to await a time when the horizon of knowledge encompassed by the proponents of Islamic culture, and with it the scientific terminology of the Arabic language, had expanded sufficiently to include and absorb the advances of other, earlier civilisations'. This expansion of course encompassed and built on the achievements of the Greeks in the science of geometry. And this process of growing awareness is suggested in the Qur'anic verse 'We will show them Our signs in the furthest horizons of the universe and within their own souls so that it will become clear to them that this revelation is indeed the Truth'. (41:53) Muhammad Asad interprets this verse to indicate 'a progressive deepening and widening of man's insight into the wonders of the universe as well as a deeper understanding of his own psyche' and Moustafa and Sperl explain that 'the term horizons (*afaq*) may be understood as referring both to the expanding range of human perception and to the varying domains of human knowledge, whatever their source may be'. That such deepening understanding can only come after a period of growth and maturation of consciousness the Qur'an stresses repeatedly. It is noteworthy that Asad explicitly attributes 'the spirit of intellectual curiosity and independent inquiry' associated with 'expanding horizons' to the 'insistence on consciousness and knowledge' in the Qur'an.

THE POWER OF DIALECTIC

A crucial driver of the advancement of knowledge and the maturation of consciousness is the process of dialectic. In Chapter 3, I contrasted this with the human propensity for dichotomization which is at the root of so much misunderstanding and conflict. While dichotomous or binary thinking 'is often marshalled to divide reality by adopting a polarized and oppositional posture which rejects the "other" and can find no commonality or convergence between competing positions', dialectic, on the other hand, is the talking and thinking process which

emerges from an understanding that all human knowledge is provisional. Through it, one ideally seeks to refine an existing hypothesis or position and advance knowledge through critical engagement with a range of evidence and a plurality of alternative views, arguments, perspectives and paradigms of thought, and through 'open and respectful dialogue and polylogue with a wider community of interlocutors'. A recently published book entitled *Tetralogue* by the philosopher Timothy Williamson has the subtitle *I'm Right; You're Wrong*'. Modelled on the tradition of Socratic dialogue, it is an extended discussion between four people on a train. Each of them starts off convinced that he or she is right, but as the conversation develops, ranging from cool logical reasoning to heated personal confrontation, they all come to realize that they need to reframe what they think about certain key concepts, including truth, falsehood, dogma, relativism, science, and superstition. Within the orbit of Muslim societies, it has been argued that there is a pressing need for the reclamation and implementation of the proper Islamic ethics and etiquette (*adab al-ihktilaf*) for engaging in respectful debate and disagreement in a plural world and a plural Islam. This includes the need for humane discussion of those contemporary issues which may provoke controversy and disagreement but nevertheless fall within the ambit of plural discourse in which diverse opinions can be legitimately expressed.

Recent research at the University of Chicago has also revealed that group discussion confers the remarkable and almost mysterious power to detect falsehood and 'sniff out what is authentic'. In fact, people in a group are 'more likely to identify lies than even the best trained individual'. In other words, it could be said that polylogue activates the discriminating faculty, that criterion or standard (*furqan*) which enables us to distinguish truth (*haqq*) from falsehood (*batil*), and right from wrong. This, however, raises some difficult questions, not least what is meant by the word 'authentic', or, in the famous words which open Francis Bacon's essay on Truth: 'What is Truth? said jesting Pilate, and would not stay for an answer'. The tetralogue between the travellers on the train does not come to any conclusions about who is

right and who is wrong, but leaves it up to the reader to decide. The research from the University of Chicago, however, seems to suggest that the direction of travel powered by dialectic is towards a destination which can be labelled as 'truth', and which has the stamp of 'authenticity'. To extend the contrast to its extremes, we have a perpetually negotiable, relativistic or equivocal reality at one end, and an absolute, authoritative and unequivocal distinction between truth and falsehood on the other. And in this context, we might factor in another note by Muhammad Asad on the role of the Pen in which he affirms the pivotal role of Divine Revelation (and of the Qur'an as *Al-Furqan*) in the spiritual and moral education of mankind: 'Furthermore, God's teaching man signifies also the act of His revealing, through the prophets, spiritual truths and moral standards which cannot be unequivocally established through human experience and reasoning alone: and, thus, it circumscribes the phenomenon of divine revelation as such'.

THE TENSION BETWEEN 'AUTHORITY' AND 'INTERPRETATION'

Sardar correctly identifies one of the main issues before us as 'the obvious tension between the difficulty of pinning down what is supposedly "authentic" (and thus defining our terms in relation to current conditions) and being as true as possible to the "original essence" of things'. He makes the important point that 'many young Muslims nowadays are trying to discover what they see as "authentic Islam", even returning to "original" primary sources, yet end up with a literalist approach. Indeed, they often accept the "authority" of those who "know" in arriving at their literalist interpretation of what it means to be a Muslim in the twenty-first century'.

This issue raises one of the most critical questions we need to address in our exploration of terminology. How can we resolve the potential dichotomy between, on the one hand, what is 'original', 'authentic' and 'authoritative', and, on the other, what is open to interpretation and contextualization? How can we accommodate in

the language we use both the divine and the human, revelation and reason, unity and multiplicity, what is 'complete' and 'incomplete', 'certain' and 'uncertain'? We will need to return to this question from various angles, and in due course I will suggest some principles which might be useful in indicating the way forward.

Both the confusion of tongues and the deeper underlying lesson of unity in diversity are beautifully illustrated in Rumi's story of the travellers and the grapes. Four travellers, a Persian, a Turk, an Arab, and a Greek, are quarrelling about how best to spend a single coin, which was the only piece of money they had between them. They all want grapes, but they do not realize this because each of them has a different word for the fruit. A traveller hears them quarrelling, realizes that they all want the same thing, and offers to satisfy all their needs with the one coin they possess. He goes off and buys them a bunch of grapes, and they are all astonished to discover that their different words were referring to the same thing.

Now, like many parables, this is a multi-layered story. On the surface, the confusion is caused by language differences, and it takes a multi-lingual traveller, a translator, to unravel the confusion of tongues. And this literal level is the level represented by the conventional interpretation of the Tower of Babel story, where mutual incomprehension is the result of everybody speaking different languages. The meaning of the parable of course goes much deeper than this. We all yearn to remember the divine unity (*tawhid*, the single coin) but we give it different names and have different conceptions of what it is. Only the sage, represented here by the traveller-linguist, can show us that what we yearn for is, deep down, the same thing.

LANGUAGE, CONCEPTUALIZATION AND RESPONSIBILITY

The context of Sardar's reminder of the divine purpose enshrined in the diversity of human languages is the story in the Qur'an of God imparting to Adam 'the names of all things' (2:30-39), and this introduces another key idea in our introductory exploration of the range, power and function of human language. In his note to 20:31,

Muhammad Asad, referring to the *Arabic-English Lexicon* of E. W. Lane, explains that the Arabic word for 'name' (*ism*) implies, according to all philologists, an expression 'conveying the knowledge of a thing' and denoting 'a substance, accident or attribute, for the purpose of distinction' – or, as Asad explains, 'in philosophical terminology, a concept'. He adds that 'from this it may legitimately be inferred that the knowledge of all the names denotes here man's faculty of logical definition and, thus, of conceptual thinking'. One might add that this faculty is also denoted on one level by the term *'aql* (reason, intellect), whose root meaning is to 'bind' or 'withhold', indicating the human capacity for separating, defining and differentiating meanings so as to arrive at precise and distinct concepts. Indeed, by virtue of his ability to think conceptually through the medium of 'the letter', man is superior in this respect even to the angels, who possess only the knowledge imparted directly to them by God, and who are commanded by God to prostrate before Adam in recognition of his appointment as *khalifah*, the one who shall 'inherit the earth'.

But this sacred trust places on mankind a heavy burden of responsibility. The divine gift of language, allied to free will (*ikhtiyar*), has given us a stick with two ends; it can either veil, obscure, confuse, deceive, corrupt, and incite to harm, or it can clarify, enlighten, and inspire to do what is right and good. The parable of the Good Word in the Qur'an (14:24-26) makes this very clear: the good word is 'like a good tree, firmly rooted, reaching out with its branches towards the sky, yielding its fruit at all times by its Sustainer's leave', but the corrupt word is 'that of a corrupt tree, torn up from its roots onto the face of the earth, wholly unable to endure'. The literal meaning of the word *qarar* is 'having no permanence whatever', unstable and ephemeral, no matter how powerful and persuasive its original impact on the minds of people who fall prey to it. The right use of language is also integral to many of the ethical principles set out in other verses of the Qur'an. It can 'invite to all that is good, enjoin what is right and forbid what is wrong' (3:104) and, in one's relationships with people of different faiths, one should speak to them 'in the finest manner', arguing 'in ways that are best and most gracious' (16:125). On the

other hand, 'man is, in most things, contentious' (18:54), a formidable arguer with an urge to quarrel for its own sake and to defend a 'position' rather than to engage in constructive discussion that is receptive to different perspectives and leads to the advancement of knowledge; he is prone to 'disputing over things' about which he 'knows nothing at all' (3:66); he is easily drawn into scurrilous gossip and 'vain, idle, talk' which brings no benefit to anyone (9:69); he is given to mockery, derision, defamation, and insult (49:11), and to the hypocrisy of 'speaking with the tongue that which is not in the heart' (48:11).

Language is at the root of so much of what we think and do, and absolutely germane to the higher ethical and spiritual dimension of our endeavors. The 'names' are not simply tools for logical thinking, for making fine distinctions. From an Islamic perspective, letters and words are the very substance of the created universe, emanating from the Divine Word which is the origin of all creation and in which all concepts find unity and reconciliation. It is therefore a sacred trust to use words which are fair, fitting, balanced, equitable and just, words which are 'in due measure and proportion'. In this conception of language, the letter is not an inanimate component of an abstract concept, but is a living entity, and the words which are formed from these letters, and the phrases, clauses, sentences and paragraphs, have the power to diminish or enhance our humanity. The word is in fact a deed, an act in itself, which carries the same responsibility as that taken in doing and acting. We have the expression 'in word and in deed' and this encapsulates this wisdom, this convergence between speech and action.

The best speech transcends mere eloquence, for just as 'the devil has the best tunes', so he may also use the smartest or most glittering words. After all, the word *dajjal* ('impostor' or 'false prophet') comes from the Arabic root which has the concrete sense of 'spreading tar on a mangy camel' so as to hide what is rotten beneath a sound appearance, and make it more saleable. Fine discourse is not covering, spinning or embellishing the truth, and least of all is it a means of inciting harm. Being meticulous in our use of words is not only a

matter of intellectual precision and conceptual clarity, but is respon-
sible social action in the service of humanity. In a detailed study of the
various components of the faculty of *'aql*, appropriately titled 'Bet-
ween wisdom and reason', Karim Douglas Crow refers to current
reappraisals of the notion of human intelligence in the field of
cognitive psychology and notes the re-appearance of the term 'wis-
dom' connoting 'a combination of social and moral intelligence, or, in
traditional terms, that blend of knowledge and understanding within
one's being manifested in personal integrity, conscience, and effective
behaviour'. He concludes that one of the key components of the
concept of 'intelligence' expressed by the term *'aql* was 'ethical-
spiritual'.

THE PARADOX OF UNITY AND MULTIPLICITY

At this point we need to pay homage to a compelling paradox. It is not
the Prophet Muhammad's 'literacy' which qualifies him for his
prophetic role; it is his 'unlettered' status and his purified heart which
ensures that he does not embroider or corrupt the Divine Message,
but conveys it with unerring fidelity and clarity. The 10th century
mystic Al-Niffari contended that 'the letter' – including its sense of
conceptual thinking governed by the power of speech (*nutq*) – is a veil
that separates us from the 'Throne' precisely because it is a tool of
endless proliferation, diversification and multiplicity calling our
attention away from Divine Unity (*tawhid*) to what is 'otherwise',
conjectural and ephemeral. Ibn 'Arabi has much to say, too, on how
one's awareness of the revelation of the nature or activity of God in
the world is a continually unfolding discovery of new implications,
and through this one comes to realize, in his words, that 'this matter
has no end at which it might stop'. The Qur'an expresses this limitless
divine creativity, through which Divine Revelation is continually
renewed in every moment, in a striking metaphor: 'And if all the trees
on earth were pens, and the sea were ink, with seven more seas yet
added to it, the words of God would not be exhausted...'. (31:27).
Paradoxically, as the Shaykh al-Akbar explains, the immutable Divine

Essence (*huwiya*) 'cannot be made manifest' and is beyond circumscription; it is, nevertheless, 'the Spirit (*ruh*) of every theophany'. The 'letter', as visible manifestation of the Divine Presence, therefore simultaneously veils and unveils. It is a *barzakh*, an isthmus between the 'two seas' of essence and form, the inner and the outer, the transcendent and the immanent. To put it another way, the outer without the inner is vacuous, a husk without a kernel, and conversely the inner without the outer, though full of potential, is mute, having no form, no vehicle, no sphere of action, no comprehensible language in which to clothe itself.

In trying to express the inexpressible, the language of the mystics may be profoundly subtle, abstruse and even impenetrable, but we should not shy away from the tension between essence and form, for this paradox is the very crux of the challenge before us. It mirrors too the critical questions raised earlier: how to resolve the potential dichotomy between, on the one hand, what is 'original', 'essential', 'authentic' and 'authoritative', and, on the other, what is open to inquiry, interpretation and contextualization; and how to accommodate in the language we use both the divine and the human, revelation and reason, unity and multiplicity, certainty and uncertainty. Meeting this challenge is integral to our intention to find what might best be described as a seminal language to activate, shape and drive forward a new and dynamic discourse on the integration of knowledge for the revitalization of education in Muslim societies. Within that practical sphere, how do we encompass stable and shifting meanings? How do we adhere to a principled compass in our quest for knowledge which avoids the peril of chronic rootlessness and disorientation and yet also steers us away from the fixity and aridity of the false certainty bestowed by the closed mind in its narrow understanding of the closed book? Either way leads to shipwreck. If the former is a whirlpool of relativism which gives us no foothold, the latter is the crushing rock of authoritarian dogma and 'scripturalism', the study of texts subject to human interpretation yet cast in stone and divorced from context and circumstance, shackling us to unbending formalisms and rigid conservatism, to sterile disputes about

the law, its interdictions, prescriptions, rulings, prohibitions and taboos, and ultimately the reduction of Islam to the beard and the scarf and to the mountain of details which has been likened to looking at Islam through the wrong end of opera glasses.

PASSING THROUGH THE CLASHING ROCKS: THE PERILS OF BINARY THINKING

The metaphor of shipwreck evokes the mythological quests of two ancient Greek heroes, Jason and Odysseus. Among the greatest dangers faced by Jason and the Argonauts on their quest for the Golden Fleece were the Clashing Rocks, or Symplegades, which guarded the entrance to the Black Sea like a gigantic pair of sliding doors, smashing together and crushing ships between them. Ananda Coomaraswamy tells the story like this:

> As the Argonauts rowed along the Bosporus, they could hear the terrifying clash of the Rocks and the thunder of surf. They released a dove and watched it fly ahead of them. The Rocks converged on the dove nipping off its tail feathers, but the bird got through. Then, as the Rocks separated, the Argonauts rowed with all their might. A well-timed push from the divine hand of Pallas Athene helped the ship through the Rocks just as they slammed together again, shearing off the mascot from Argo's stern. Argo had become the first ship to run the gauntlet of the Rocks and survive. Thereafter the Clashing Rocks remained rooted apart.

Many other examples of the same motif could be chosen from other cultures and traditions – that is, the motif of the 'Active Door' dividing the known world from the unknown Beyond, and through which the hero or seeker must pass to succeed in the quest, which is none other, in essence, than the return to his or her original home. To pass between the Rocks is to pass through the 'strait gate' or the 'needle's eye' between the contrary pairs of opposites and beyond the polarity which necessarily characterises the conditioned world. It is

to be guided by the lamp 'lit from a blessed tree – an olive-tree that is neither of the east nor the west' (Qur'an, 24:35). In terms of our own quest towards the integration of knowledge, it is to strive to resolve the ingrained dichotomies and stark dualisms which characterize binary thinking in all its forms, and which underlie those potent adversarial paradigms which sustain tribalism. The 'Clash of Civilisations' is a prime example. We might frame this in terms of the long-standing discourse of Orientalism which, as Sardar explains, promotes a sense of fundamental difference between the West and the East, between 'us' and 'them', and 'is not just a way of knowing the Orient but also a way of maintaining power over it'. This is a very good example of the way in which the West cements its own sense of civilizational superiority through what Sardar identifies as its 'ultimate power' – the 'power to define'. Elaborating this important insight, he points out that,

> the real power of the West, its worldview with all its axioms and assumptions, is not located in its economic muscle (which is still considerable), its military prowess (no other power on the planet can challenge the military might of the US), and technological ability (which has escalated considerably with the emergence of the Internet). Rather, it resides in its power to define. The West defines what is, for example, freedom, progress, civilisation and civil behaviour; democracy and human rights; law, tradition and community; reason, mathematics and science; who is a dictator or a terrorist or a moderate person; what is real and what it means to be human. Academic disciplines provide learned, scholarly and rational legitimacy to the defining concepts. The non-western cultures and civilisations have simply to accept these definitions or be disciplined by disciplines and be defined out of existence! Something that is clearly happening to Islam and Muslim societies – this is the real catastrophe.

At the same time, the definitions which feed the us-and-them mentality of the Clash of Civilizations are reciprocal; they work both ways, even if the Western definitions hold sway to a large extent and

bolster Western hegemony. Strong versions of the discourse of 'Westo-phobia', for example, include not only the prejudice that all global ills are caused by Western influence and that solutions must rest on rejection and even vilification of the West, but also the idealization of non-Western cultures.

Nevertheless, it is an awkward fact that one-dimensional thinking bestows tangible survival benefits. The idea of the 'narrative fallacy' introduced by the trader-philosopher-statistician Nassim Taleb in his popular book, *The Black Swan*, provides a valuable insight. Referring to this at the beginning of the chapter entitled 'The Illusion of Under-standing' in his book *Thinking, Fast and Slow*, Nobel Prize winning economist Daniel Kahneman refers to narrative fallacies as 'flawed stories of the past' which 'shape our views of the world and our expectations for the future'. As explained in Chapter 3, they are 'simple' (even simplistic) but compelling explanatory stories which arise from our continuous attempt to make 'comforting sense of an increasingly complex world'.

In the same way, we know from the psychology of perception that the human mind tends to see what it wants or expects to see. It is well attested that even the very 'rational' scientific community is suscep-tible to confirmation bias. When presented with visual illusions which have two possible and equally logical explanations, subjects prefer to disambiguate them on the basis of their familiar knowledge of the world. Thus, a picture depicting a staircase which could, according to strict spatial logic, be interpreted as either a normal ascending staircase or an upside-down descending staircase (suitable only for flies) will typically be interpreted by subjects as the former. Without the rapid automatic routines generated by top-down, expectation-driven processing we would not be able to function in the world, for we would have to analyze everything laboriously from the bottom-up as if we were encountering it for the first time. While the survival benefits of rapid visual perception based on concrete experience are obvious, the outcome of rapid thinking is clearly a mixed bag.

REALIGNING OUR DEFINITIONS TO CREATE
A NEW PARADIGM

As for Odysseus, our other Greek hero, he is the epitome of the hero who combines courage and daring with that particularly Greek quality of shrewd sagacity (or discerning intelligence). He too has to steer a perilous course, in his case through the Straits of Messina between two mortal dangers, that of Scylla, the hideous monster with twelve feet and six heads (each with three rows of teeth) which will inevitably devour some of his men, and Charybdis, the whirlpool, which can destroy them all. In his care to avoid the whirlpool, he necessarily drifts nearer to Scylla and some of his men fall victim to its snapping heads.

The phrase 'to fall from Scylla into Charybdis' means to go out of the frying-pan into the fire. I always prefer to think that Odysseus made the conscious decision to steer closer to Scylla, rather than inadvertently drifting towards the monster, because he was bent on avoiding the greater danger of the whirlpool. Whatever the case, his course involved a minor inclination towards one side so as to avoid catastrophe.

We might reflect on whether this image symbolizes for us the same need at the present time in our quest to develop a conscious language of orientation which will enable us to define our position and navigate our course in such a way that we can honor the best of the old and the new, the traditional and the progressive, whether of the East or the West. By looking both forwards and backwards, like Janus, we hold to that paradox which protects us from capitulating either to a fundamentalism stripped of humanity or a progressivism emptied of the sacred. In one sense, we are the 'community of the middle way' (Qur'an 2:143) who take the 'straight path', but in another sense we need to have the shrewd discernment of Odysseus in recognising when we need to incline more deliberately towards one side as a corrective to what is out of balance. It can be argued that the Charybdis of fundamentalism, regression, stagnation and intolerance is an even greater danger than the Scylla of 'relativism' or 'post-modernism'.

That is not to say, of course, that we should veer so dangerously close to Scylla that we buy into uncritical and servile genuflection to the myth of 'progress at all costs' or sell out to an unprincipled or disorientated 'anything goes' mentality devoid of moral or ethical compass, but it does mean that we have to negotiate that encounter in such a way that enables us to recapture the original spirit of Islam and its progressive vision for humanity.

Thus far, we have attempted to identify (often with reference to key verses of the Qur'an) those features of language which can generate axioms to guide further discussion: the divine purpose enshrined in the diversity of tongues; the role of language as the medium of conceptual thinking and the cumulative expansion of knowledge; the importance of cultural exchange in the evolution of civilization; the sacred trust imposed by the gift of language to use words wisely and well as ethical and responsible social action in the service of humanity; and the power of discussion and dialectic in the forging of relationship and the refinement of knowledge and understanding. At the same time, we have highlighted the self-evident fact that language can not only be used for positive ends – to clarify, instruct, enlighten and inspire to do what is right and good – but also to veil, divide, obscure, confuse, deceive, corrupt, and incite to strife and harm. We have also seen how its power to define can be misused through the misappropriation of terminology to give disproportionate clout to a particular paradigm, worldview, ideology, or civilizational perspective, and how this tendency to emphasize a narrow range of meaning in the deployment of terms and concepts, often in the interest of cultural supremacy of one kind or another, seems to be ingrained in the way humans think. To challenge it is to swim against the tide. Sardar homes in on the pressing need to challenge the dominant narratives and prevailing discourses:

> The task of reforming education in Muslim societies is thus much more profound then we have hitherto imagined. It has two basic components: to deconstruct the definitional power of the modern knowledge system – complete with its disciplines, institutions, and processes –

and its western worldview; and to produce alternative paradigms of knowledge formation, that take into account the histories, legacies and traditions of Islam and offer a more humane and value based appreciation of what constitutes learning and its advancement.

The need for new paradigms is not simply a Muslim concern. Indeed, a growing number of scholars, West and East, are now questioning the dominant paradigms – and hence the defining power of the West – and calling for more humane paradigms that consider the diversity and plurality of our societies and take the needs of the environment and planet as a whole into consideration. Changes in the contemporary context, and the accelerating pace of new technologies and innovations that are transforming the world have given urgency to these demands.

HOW DISCOURSE SHAPES UNDERSTANDING

In his book *Future: All That Matters*, Sardar discusses the overall objective of the methodology of causal layered analysis (CLA) as a means of highlighting 'the parochial and brittle nature of current social practices so they are not projected into the future as universal truths and practices'. CLA, he explains, 'seeks to "undefine" the future in an attempt to ensure that it is not taken as *a priori* given, that trends and projections are not taken for granted, that non-western cultures, epistemologies and modes of being are appropriately represented, and a wide range of metaphors and images are used to think creatively about potential alternatives'. The role of discourse is of course central to shaping our understanding of the world. 'A discourse', says Sardar, 'is a strongly bounded area of social and cultural knowledge, a system of assumptions, statements, disciplines and ideas', and he goes on to say that 'it is through discourses that the world is brought into being', which is another way of expressing the fundamental insight gained from the discipline of critical discourse analysis (CDA) that attitudes and prejudices are learnt through 'text and talk', even at the subliminal level.

If the strategic action of discourse is dependent to some extent on the psychological disposition of the audience, this is also a reciprocal process in that the psychological disposition is itself conditioned by the discourse. The relationship between language and cognition is not a one-way street. Thoughts and feelings are created and reinforced by discourse, as much as discourse is used to express them. Two examples come to mind. In his investigation of the representation of Islam in the British press, Costas Gabrielatos, drawing on his meticulous work in the field of corpus linguistics, has revealed the insistent drip-feed of collocations, both explicit and implicit (as, for example, between Islam and 'terrorism') in the British press which inevitably conditions public attitudes. It is a sad fact that if you repeat something enough times like a mantra, it becomes a 'script', a formulaic structure so embedded in the mind that is becomes highly resistant, and even impervious, to modification. The effectiveness of rhetorical manipulation through repetitive phrases is of course well-known by politicians and spin doctors, in the same way as slogans and jingles are the stock-in-trade of advertising. Repetition is one of a variety of discursive moves and ploys identified in the field of critical discourse analysis. Teun van Dijk has rigorously examined how discourse promotes and sustains racism by promoting prejudiced social representations shared by dominant groups (usually white, European) and based on ideologies of superiority and difference. An example is his detailed analysis of some fragments of a book misleadingly entitled *The End of Racism* by Dinesh D'Souza, a book which embodies many of the dominant Eurocentric supremacist ideologies in the USA, and which specifically targets one minority group: African Americans. This book is one of the main documents of conservative ideology in the USA and has had considerable influence on the debates on affirmative action, welfare, multiculturalism, and immigration, and on the formulation of policy to restrict the rights of minority groups and immigrants. Such work reflects one of the key objectives of CDA noted by Sardar – its examination of 'power relationships that are created by discourse in an attempt to give voice to those who have been marginalized from and within the discourse'.

DISENTANGLING MUDDLED TERMINOLOGY

Four hundred years ago, Francis Bacon, philosopher, statesman, essay-ist, and champion of empiricism and scientific methodology, appealed for a radical move away from the scholastic tradition imprisoned by arguments and reliance on authority. To do so, he says, we must reconnect knowledge with action for 'the use and benefit of man' by purging the mind of prejudice, conditioning, false notions, and unquestioned authority – those fixations which he called the 'idols of the human mind' and which distort and discolor the true nature of things – and rely instead on direct experience, perception, observa-tion, and 'true induction' as methods of gaining sound knowledge. Amongst the more specific examples of hindrances to understanding included in Bacon's 'idols' are: trying to make things fit into patterns, seeking evidence to support preconceived notions, seeing what one expects to see, believing what one wants to believe, generalizing, favoring one outlook or perspective over another (e.g. antiquity over novelty, the part over the whole, differences over similarities, or *vice versa*), and failing to understand that words may have more than one meaning. This is a remarkable list which has such a modern ring to it, converging as it does so strikingly with many of the key modern findings in cognitive psychology and related disciplines about the nature of conditioning, prejudice, confirmation bias, and other imped-iments to learning.

While all Bacon's revolutionary psychological, philosophical, scien-tific and linguistic insights have much to tell us, we might select from his list of 'idols' those that are directly relevant to our undertaking to create a lexicon or glossary that can begin to promote some clarity in the definition of key terms. These are the 'Idols of the Marketplace' (*idola fori*), described by Bacon in *Novum Organum* (1620) as 'the most troublesome of all', and which, he says, 'have crept into the understanding through the alliances of words and names. For men believe that their reason governs words; but it is also true that words react on the understanding; and this it is that has rendered philosophy and the sciences sophistical and inactive'. Here, Bacon explodes the

popular belief or myth that thoughts are formed into words in order to communicate ideas and opinions to others, pointing out that words actually often arise as substitutes for thoughts. Although 'learned men' were normally careful about definitions and explanations, setting the matter right 'in some things', it was also the case that 'words plainly force and overrule the understanding, and throw all into confusion, and lead men away into numberless empty controversies and idle fancies'. We may be reminded here of Al-Niffari's depiction of 'the letter' as a tool of endless proliferation and conjecture, calling our attention away from Divine Unity (*tawhid*).

We can already see very clearly Bacon's anticipation of the modern science of semantics, but also one of the foundational concepts of critical discourse analysis within the wider field of cultural studies – the way that text itself is instrumental in creating and sustaining power relationships. His elaboration of the confusion caused by words is worth quoting in full:

> Now words, being commonly framed and applied according to the capacity of the vulgar, follow those lines of division which are most obvious to the vulgar understanding. And whenever an understanding of greater acuteness or a more diligent observation would alter those lines to suit the true divisions of nature, words stand in the way and resist the change. Whence it comes to pass that the high and formal discussions of learned men end oftentimes in disputes about words and names; with which (according to the use and wisdom of the mathematicians) it would be more prudent to begin, and so by means of definitions reduce them to order.

In other words, understanding is not only hindered by the common (i.e. 'vulgar') definitions of words but also (even among the more learned) by disputes over their multiple meanings. This confusion and ambiguity is even more marked in today's increasingly complex world, as Sardar rightly points out: 'The more complex society becomes, the more specialised contexts it develops. Complexity means different, even contradictory, meanings of words can continue to exist side by

side or be used by different groups simultaneously. As new meanings and implications of language are being developed there is no inflexible law decreeing that old implications, associations or evocative import disappear'. To disentangle this muddle, and set a navigable course which can begin to meet our objectives, we need, as Sardar recommends, to start from the guiding premise that 'language is the basic tool through which we learn, teach, adapt to change and advance knowledge. It is an inseparable part of how we articulate our worldview, how we conceive ourselves as individuals and societies, shape our perceptions of the world around us, and engage with the world to change it'. We therefore need to define a set of key terms 'in our own specific way, give them a contemporary meaning, and incorporate them within the Integration of Knowledge discourse. What, for example, do *we* mean by freedom, human rights, democracy, secularism and so on? What is the contemporary relevance of Islamic terms like *khalifah, shura, ijma, istislah,* or *ihsan?*'

It is important to emphasize at this point that the intention to define words 'in our own specific way' does not entail a blinkered disregard or dismissal of the way in which they might be defined by others. As Ibn Rushd argued, there exists a continuum of different views on a particular issue, and a variety of language available to describe it. Equivocation in language, he upheld, is not something to be challenged or deplored; rather it is to be accepted and respected as a natural feature of our lives as diverse people living in a community with a wide range of ends and purposes. Throughout his philosophy, Ibn Rushd tried to show how it is possible for one thing to be described in a variety of ways, and how apparently contradictory views can be reconciled if one sees them all as different aspects of one thing. This message of unity in diversity is precisely the message of Rumi's story of the Travellers and the Grapes to which I referred earlier. Umberto Eco refers to Ivanov's point that 'each language constitutes a certain model of the universe, a semiotic system of understanding the world, and if we have 4,000 different ways to describe the world, this makes us rich'.

Awareness of polysemy (multiple meanings) need not, however, be

opposed to the 'rebalancing' process by which we seek to find semantic orientation in the contemporary context to fulfil our own purposes and objectives.

ORIENTATION, BALANCE AND INTEGRATION

Bacon had already seen that having agreed definitions to start with involves a circular reasoning conundrum: 'Yet even definitions cannot cure this evil in dealing with natural and material things, since the definitions themselves consist of words, and those words beget others'. Awkwardly, the words used in any definition must in turn be defined, an unending process which can never generate an exact understanding of the meaning of the words.

Clearly, this conundrum cannot be resolved through the medium of a glossary, which, by definition, cannot be a means of excavating meanings not couched in words. Yes, the 'letter' can be a 'veil', a source of confusion and distraction, 'a fertile ground' as Sardar contends, 'for misinterpretation and misunderstanding', but this is precisely why we need a glossary which provides orientation and balance in the way we navigate concepts, 'a tool for developing a more nuanced under-standing of indispensable terms and concepts that become the building blocks of the Integration of Knowledge discourse'. Three terms intro-duced here – orientation, balance and integration – provide, I believe, the essential matrix for our endeavor. And the deconstruction and realignment of definitions rooted in such a matrix requires more than a straightforward lexicon or glossary of terms. It has to be a deeper 'exploration of the changing meaning of terms and concepts, a histor-ical and moral critique, and an attempt at contemporary formulation that has meaning within our first principles'. Most importantly, 'its function is to lay the foundation of a new integrative and inclusive mode of consciousness that move us towards the new paradigm'. Sardar's reference here to an 'integrative mode of consciousness' echoes the work of the philosopher Jean Gebser to which I referred in Chapter 3.

TRUTH, JUSTICE AND THE MIDDLE WAY

Holding to our guiding principles of orientation, balance and integration will enable us to apply much-needed correctives to definitions without succumbing to the wholesale espousal of any one-sided paradigm of thought. And in that process of realignment, we must not, I believe, shy away from the belief that we are also engaged in the pursuit of 'truth'. In discussing the way in which words 'betray their own purpose, obscuring the very thoughts they are designed to express', Bacon affirms the need to excavate 'true meanings', for 'the constant impact of words variously used without attention to their true meaning only in turn condition the understanding and breed fallacies'. Our vision must surely extend beyond the postmodernist rejection of any objective explanation of reality. While we might share 'postmodernist' scepticism of monolithic explanations that claim to be valid for all groups and cultures, and might acknowledge the valuation of concrete experience over abstract principles and the necessity for interpretation, historicity and contextualization, this does not mean we need to abolish any conception of 'truth' which is not merely a construction of the individual human mind, eternally fallible, relative, and rootless. We need to avoid the rudderless relativism which admits of nothing certain or universal as much as we need to steer well clear of the crushing absolutism which obliterates all context. In this, we follow the Middle Way in our search for the Truth, which, as Boethius put it, is a 'mean between contrary heresies'. The Middle Way is not to be conceived of as a dull compromise any more than 'moderation' should be confused with half-heartedness or 'mediocrity'. Rather, it is the Golden Mean, an aspect of the 'due measure and proportion' with which everything is created (Qur'an 54:49). In his exposition of Islamic ethics, Al-Ghazali owes much to Aristotle's formulation of this concept which positions the perfection of human virtues between 'excess' and 'defect'. The English word 'moderation' comes from Latin *modus*, 'keeping within due measure', which is related to another word which is also the source of English 'modest'. Etymologically, moderation has the same inherent meaning in English as modesty, a

connection which is also truly Islamic. The Prophet Muhammad is reported to have said: 'Every religion has a distinctive feature and the distinctive feature of Islam is modesty', and 'True modesty is the source of all virtues'.

The mention of 'measure', 'proportion' and the Golden Mean (and other related concepts such as 'ratio' and 'symmetry') alerts us to the underlying conceptual 'geometry' which needs to govern our approach to the definition of words. In the same way as the Proportioned Script in Arabic penmanship is derived from a unifying geometric grid which governs the execution of all 28 Arabic letter shapes, so the most fitting use of words in any language needs to be based on a creative geometry of concepts. And this is a matter of 'justice' in its deepest sense, a principle in which aesthetic and moral strands of meaning are inter-twined, in the same way as the deepest sense of 'beauty' in Arabic (*husn*) combines both beauty and moral excellence. The root meaning of the Arabic word for 'justice' (*'adl*) includes the concepts of fairness, equity, non-discrimination, counterbalance, rectification, and propor-tion. In much the same way, the English word 'fair' denotes not only what is just, equitable and reasonable, but also what is beautiful by virtue of its proportionality. Its original Germanic root is 'fitting', that which is the right size, in the correct ratio or proportion. The range of meanings of this word reflects a truly Islamic concept, the idea that to be just is to 'do what is beautiful' (*ihsan*), to act in accordance with our original nature (*fitrah*), which God has shaped in 'just propor-tions' (Qur'an 82: 7) as a 'fitting' or 'appropriate' reflection of divine order and harmony. It is noteworthy, too, that the word 'decency' has exactly the same underlying meaning as 'fairness'. It comes from Latin *decere*, 'be fitting or suitable', and is closely related to the word 'dignity'. To be fair and decent, and hence to act with dignity (and also with 'decorum') is to behave proportionately, to do what is balanced and appropriate in the circumstances, and to abide by values which guide us to what is right and good.

The connotation of 'beauty' in the word 'fair' is now somewhat archaic, as in the sense 'the fairest maiden', which is referring to more general beauty rather than just to hair color in its sense of 'blonde'.

Even so, the word has retained the sense of proportionality in its connotation of 'moderation'. Fair weather is pleasantly warm and dry, but always falls short of a heat wave; to have a fair chance of success is to have a reasonable chance, and even a fair bit of work, though considerable, is never extreme. The range of connotations, both archaic and modern, directs us to a semantics of 'justice' which supports our vision of the clarification and 'redefinition' of meanings, and all those elements of conceptual 'geometry' which this entails – realignment, repositioning, counterbalance, proportionality, moderation and balance.

The striking convergence of such meanings within one semantic field in Arabic and English might also remind us that an integrative approach to a glossary of terms needs to include the recognition of what is best in every culture and civilization. As such it might also be regarded as including the reclamation of a 'primordial' language of universal concepts (the 'Names' taught to Adam) which permeate all human languages, the underlying unity within the diversity represented by the Tower of Babel. This is not to say, however, that all 'authentic' meanings are generalized as being located in an archaic past and only retrievable through specialized etymological excavation, nor that all subsequent shifts in meaning are the result of a negative process of semantic entropy by which 'original' meanings have become corrupted over time. After all, prehistoric Indo-European roots have to be reconstructed as hypothetical forms from known forms in cognate languages using phonetic rules; equally, the seminal concepts represented by these roots can only be hypothesized. Nevertheless, as Sardar recommends, our approach to language needs to include 'a deeper exploration of the changing meaning of terms and concepts'.

The transmission and further evolution of key concepts through the confluence of civilizations is well illustrated in the thought of Francis Bacon's namesake, the thirteenth-century philosopher Roger Bacon, who, according to the late President of Bosnia, 'Alija 'Ali Izetbegovic, 'set the entire structure of English philosophical thought' on the pivot of the Middle Way, encompassing many dimensions – political, social, moral, and spiritual. This stream of thought has at its

heart the principle of balance: balance between reason, empirical observation and faith; between individual freedoms and wider responsibilities within society; between pragmatism and the highest ideals; and between a practical concern with the immanent condition of mankind and a hunger for transcendence. Izetbegovic adds that there is 'another important fact about Roger Bacon which has never been sufficiently studied and recognized: the father of English philosophy and science was a student of Arabic'. Indeed, he lectured at Oxford in Arab clothes. He was strongly influenced by Islamic thinkers, especially by Ibn Sina, and to this influence can be attributed the character of Bacon's thought and, through him, the origin of the middle way as 'the single most important guiding principle in English life'.

DISTINGUISHING POSITIVE AND NEGATIVE CONNOTATIONS

Our examination of the range of meanings thrown up by the concept of 'justice' and 'fairness' in Arabic and English has pointed to various principles of investigation and analysis which might inform an exploratory glossary. These include the exploration of the range of meanings of selected words, whether concurrent in modern day usage, or changing over time, and can take in the diverse connotations which can be extracted from the typically triliteral consonantal root system in Arabic (as a Semitic language) as well as etymological excavation in the case of English (as an Indo-European language). We need to be aware that the *same* word may be used with different meanings or emphases in current usage (e.g. tolerance, secularism, radical, conformity, multiculturalism, integration), and that a similar divergence in meaning may also apply to *related* words (radical/radicalization, moderation/mediocrity, morality/moralism, and so on). Within both these categories, we need to distinguish positive and negative connotations. We may find that the positive meanings tend to lie at the golden mean, and the negative ones at the extremes. A good example is the word 'straight'. Muslims follow the Qur'an in praying to be guided on the straight path (1:6) and not to swerve from it (3:8). Following the 'straight' path, however, does not have to be an

excessively narrow path, a strait-jacket, a situation of 'dire straits'. The root of the word 'straight' (and 'strait') is Latin *strictus*, and it gives us many words expressing strictness, including 'stricture, stringent, constrain, stress, distress, and distraught'. There is a message here for all those who push the beneficent sense of words beyond boundaries, either to excess or defect. If the excess of straightness is the strait-jacket, its defect is the crookedness or deviousness which has lost any sense of moral compass or orientation. A 'bent copper' is a corrupt policeman, and to 'go straight' is to get back on the right track after a stretch in prison.

But we have to be very careful here, because the association one can make between a lack of straightness and the concept of 'deviation' or 'deviance' (as well as that of 'innovation') raises other tricky issues, not least the problems caused by the disproportionate fear of deviation or 'going astray' in some communities. The beneficent matrix of 'community' is not the same as the rigid 'communitarianism' that oppresses and dehumanizes the individual by imposing shame and stigma on those who are seen not to conform to group norms. Ibn Khaldun recognized the equivocal nature of social bonding in his use of the term *'asabiyyah* (tribal partisanship). It can be a source of solidarity and social cohesion, but in its negative form it is that crudely jingoistic and smugly ethnocentric mentality which elevates tribal prejudice and parochial self-interest above what is right and just.

Much harm and anguish is caused by tribal and communitarian oppression. Deviation does not have to signify deviance in its sense of the brazenly bizarre, the grotesquely twisted or the absolutely forbidden, but may simply refer to 'divergence' in its more positive sense of branching out from established modes of thought and suspending judgement so as to remain open to multiple creative possibilities. Studies of creativity have shown how optimal creativity may result from an interplay between convergent and divergent approaches, with the former utilising familiar and well-established standards and criteria to make judgements and come up with the single-best or 'right' answer, while the latter is more open to exploring unexpected connections and remaining open to ambiguity. This echoes my earlier

remarks about the importance of one of the vital outcomes of the process of dialectic – its release of the open-minded thinker from rigid affiliations, fear of change and instability, false certainties, and reluctance to approach anything which may be threatening to one's sense of self.

EXCAVATING THE BEST MEANINGS

We have seen how the excavation of meanings through etymology, the historical origin of words, can help us explore the conceptual landscape, and it is worth noting that in a language like English, which has a mainly dual linguistic heritage – Germanic and Latin (through Norman French) – there may be important differences between words which may be used interchangeably but which actually have quite different underlying connotations depending on their original meanings. A suggestive example is the difference between 'freedom' and 'liberty'. The former is an Anglo-Saxon word, rooted in the Teutonic *frei* (cognate with the Sanskrit *priya*) meaning 'to hold dear'. It goes back to the Indo-European root *pri-*, 'to love' or *prai*, meaning 'beloved', hence 'precious', and also 'at peace with'. The name Godfrey means 'peace of God'. Norse Freya or Frija is the Goddess of love. 'Freedom' is also a sister-word to 'friend', whose source (Old English *freond*) meant more than 'friend' – also 'lover'. This sense still survives in the way the Sufis refer to the Divine Beloved as 'The Friend'. The original meaning of 'free' was a term of affection uniting the members of a family in a common bond, but explicitly excluding their servants or slaves (those who were not 'free'). Later, the meaning shifted from 'affection' to 'freedom'.

'Liberty' is a French word, inherited from the Romans. Although its original Indo-European root *leudh*, still intact in ancient Greek *eleutheros* 'free', may have denoted the sense of 'being a member of a free people' as opposed to 'being a slave', its Latin root, *liber*, means to do what you want to do, to 'do your own thing'. The same root gives us *libertarian* (and *libertarianism*), *libertine* (a rake or debauchee), *libido*, an urge, *libidinous*, given to indulging ones urges, and

(borrowed from the Greek) *libation*, an outpouring. For arch-conservatives, even the word *liberal* can carry the connotation of licentiousness and lawlessness, as well as the disparaging sense of 'bleeding-heart liberal', although its earlier sense in English was 'generous' and 'appropriate to the cultural pursuits of a free man', as in the 'liberal arts' or a 'liberal education'. These connotations have survived to some extent in modern usage, and the term 'liberal democracy' still holds a generally positive connotation across a broad spectrum of political persuasions. While there is, in the case of the word 'liberty', a continuum of connotations ranging from generosity, breadth of education and cultural enrichment through to the self-indulgent individualism of 'doing whatever you like', it can be argued, as Bert Hornback does, that a basic conceptual contrast between 'freedom' and 'liberty' is still retrievable. 'Freedom', he says, might be defined essentially as a social word and 'liberty' as a selfish, anti-social, irresponsible word. Thomas Jefferson was emphatic about the responsibility which came with liberty, the 'price' of which, he said, is 'eternal vigilance' and he would no doubt have questioned John Stuart Mill's assertion that 'liberty consists in doing whatever one desires', an opinion which Hegel was to dismiss as one of utter immaturity of thought.

It has to be said at this point that it would of course be impossible and undesirable to expect a categorical distinction between 'freedom' and 'liberty' to be embraced in public discourse, for language use develops organically over time and cannot effectively be controlled by decree or legislation, as we know from the largely impotent efforts of the Academie Française to stem the flow of borrowings from English into French. I have explored the varied connotations of 'freedom' and 'liberty' in some detail because this case is doubly instructive. It illustrates the conceptual richness which emerges from the understanding that English does not have a monolingual heritage, but is itself the product of a polylogue. It also illustrates the important principle of the continuum of meanings, and, within that, the positive and negative meanings we need to navigate. Rather than set up a quibbling and judgmental dichotomy between 'freedom' and 'liberty', it is far more useful to focus on the underlying concepts, so that

whichever word we use, we are investing it with the best and most beneficent of the senses derived from the range of meanings associated with both words. Thus, in using the word 'freedom' or 'liberty', we would be referring to a composite sense which balances a recognition of both the needs of the individual and the importance of communal responsibility. After all, just as the over-valuation of individual needs can lead to selfish individualism, so the over-valuation of shared social bonds can lead to tribalism and communitarianism. We should not idealize the social dimension of 'freedom' any more than we should idealize the individual dimension of 'liberty'. Such considerations have pressing contemporary relevance, as in the ongoing debate over 'freedom of speech' and what this means in a 'liberal democracy'.

'ORIGINAL' MEANINGS, SEMANTIC CHANGE AND TERMINOLOGICAL ENTROPY

We have observed various instances of the way in which the meaning of words changes over time. Understanding earlier connotations can be useful in shaping the rounded definitions we aspire to use in the creation of a discourse which can serve as a suitable vehicle for the Integration of Knowledge. Ideological influence can be readily observed in semantic change, as for example in the shift in the meaning of the word 'craft'. The original meaning was 'power, strength', as in Old English, and in German and Swedish *kraft* to this day. The sense of 'skill, trade, profession' also developed in Old English, and there is an evident semantic relationship between power and skill, since skill enables and empowers. The negative sense of 'craft' may have developed because of the influence of the church in teaching that the only 'true' power resided in Christian teachings alone, and any power or skill derived from pagan culture was a Satanic and heretical deviation from the truth, hence devious, or 'crafty'. In the final section of this essay (the model glossary entry for the keyword *Excellence*), a similar shift is noted in the radical change in the meaning of 'cunning'. Derived from the Indo-European root *gno-*, the source of 'gnostic' and 'knowledge', it originally meant 'learned'. The development of its

negative sense of 'skillfully deceitful' towards the end of the 16th century mirrors the development of the word 'crafty'.

In both cases, the original meanings survive to a greater or lesser extent – in the case of 'craft' in its positive sense of skilful workmanship, and in the case of 'cunning' in its parallel formation 'canny', which still carries the positive sense of shrewd discernment.

However, it is obvious that when the words 'crafty' and 'cunning' are used today, they invariably mean 'devious', and a more positive spin on them cannot be engineered by artificially resurrecting lost connotations. The case of 'freedom' and 'liberty' is different in a very important way, because, as we have shown, they can be defined and used to incorporate the best of the historical meanings carried by both.

The same applies to a group of related words which have seminal significance for us in our navigation of key concepts. These are 'originality', 'simplicity', 'identity', 'orientation', 'authenticity' and 'authority'. The original Greek sense of 'originality' was not 'inventiveness' but 'in accordance with our original nature'. Originality was not seen as a special gift of creative thinkers and artists but as an ordinary, innate capacity common to all human beings, such that, for the ancient Greeks, even a 'simple' illiterate person was imprinted with an innate understanding of universal principles. Thus, the essence of, say, geometry (as a symbolic system representing archetypal order, and hence virtue) was embedded in the human soul. Etymologically, the word 'simple' itself denotes 'same-fold' – that is, not multifarious. It goes back ultimately to a prehistoric Indo-European root which passed into Latin as *simplus*, 'single' and was the source also of English 'same, similar, and single'. The 'simple' person is a 'single', undivided person, one who is always 'the same', true to himself or herself. Simplicity is like a mirror which reflects the divine unity at the core of every human being.

The concept of singularity is also embedded in the word 'identity', whose essential meaning is best preserved in its derivative 'identical' which reflects the meaning of Latin *identitas*, literally 'sameness', derived from Latin *idem*, 'same'. The sense of 'individuality' or 'set of definitive characteristics' arose from the notion of something always

being the same or always being itself (rather than something else). We speak of varied 'identities' and 'ways of belonging' and the search for 'identity' is a pressing contemporary concern. The origin of the word reminds us that even though we may hold 'multiple identities' ('British' and 'Muslim', for example) we can still be faithful to an integrative vision of unity in diversity which perceives the Divine Singularity as the 'original' core of our 'identity'. Both the English words 'origin' and 'orientation' come from a common source, Latin *oriri*, 'rise', and the verb 'orient' originally meant 'turn the face to the east', the direction of the rising sun. Whether, as Muslims, we face Mecca or, as Christians, we face the East, or, indeed, wherever we face, we have within us a *qibla* and criterion (*furqan*) or compass that orients us to or origin, a touchstone that shows us the way to be true to be our essential nature, in effect to be an 'authentic' human being. The word 'authentic' comes from Greek *authentikos* and its essential meaning is 'having the authority of the original creator'. Its original meaning in English was 'authoritative'. There is a clear intersection between the underlying Greek senses of 'authentic' and 'original'. The authentic person is 'authoritative' (which is not to say 'authoritarian') only because he or she is stamped with the attributes of the ultimate 'authority', the original Creator. This accords completely with the Islamic concept of the human being as *khalifah*, 'vicegerent' or 'representative' of God.

THE IDEOLOGICAL LURE OF 'ISMS'

Perhaps the most prominent example of the contrast between positive and negative concepts is the way in which the abstract noun suffix *-ism*, when added to a word, so often fundamentally changes its orientation, tending to indicate an abstract ideology or system of thought rather than a concrete experience. Differences in meaning in pairs of related words are not only indicated by the '-ism' suffix, but by other suffixes: one might distinguish, for example, between religion and religiosity, unity and uniformity, idea and ideology. The word 'ideology' first appears in 1796 borrowed from French 'idéologie', the study

or science of ideas or the political or social philosophy of a nation. The French coined the word during their secularizing Revolution. John Adams (in some writings of 1813) mentions the usage of the word by Napoleon Bonaparte himself to mean 'impractical theorising'. Its definition as a set of ideas, doctrines or beliefs was first recorded in English in 1909.

Thus far, we have already encountered various instances of the shift in meaning effected by the '-ism' suffix and its ideological import: community/communitarianism, liberty/libertinism, and we might also point to other contrasting pairs: tradition/traditionalism, progress/progressivism, modernity/modernism, fundamental/fundamentalism, morality/moralism, scripture/scripturalism, 'the letter'/literalism, form/formalism, duality/dualism, relativity/relativism, law/legalism, and totality/totalitarianism. We have argued for the need to distinguish the *authority* of divine revelation which liberates the human soul from the *authoritarianism* imposed by narrow human formulations which imprison it; and the existence of *absolute* and timeless truths from the tyranny of an *absolutism* which obliterates all context. At the same time we need to distinguish *identity* from *tribalism* and *sectarianism*, *diversity* from *division*, and *unity* (in diversity) from the *uniformity* of mono-cultural attitudes which dichotomize reality into competing unilateral or unipolar worldviews and ultimately into the isolating pathology of civilizational supremacism.

Similarly, the qualities of *individuality* need not be conflated with the *individualism* which gives man no point of reference beyond his own ego and the gratification of his own individual desires. The expression of individuality, which is nothing more than the realization and expression of the personal uniqueness of each human being, is not in opposition to the needs of the community. Quite the contrary, in an age of increasingly sterile conformity, uniformity and standardization, the contribution of creative individuals who are realising their individual potential has never been needed more as a means of enriching and revitalising communities. *Communitarianism* will always suspect the individual of individualism, but a living *community* will respect and nurture individuality as a valid expression of diversity

while being able to balance individual needs and modes of expression with collective rights.

Other important distinctions can be made between reason and rationalism, intellect and intellectualism, synthesis and syncretism, matter and materialism, science and scientism, and so on. Reference was made in Chapter 3 to Muhammad Asad's tribute to the modern 'age of science' which he attributes to the spirit of 'intellectual curiosity and independent inquiry' ignited by the 'insistence on knowledge and consciousness' in the Qur'an. He did not, however, intend this to be taken as an endorsement of the reductionism and materialism entailed in dogmatic scientism, which overstretches the ability of the scientific method to encompass all of reality and 'explain' it through quantitative means, even to the extent of upholding that observable reality is the only reality. On the contrary, the limitations of the scientific method are clearly noted with reference to the term *al-ghayb* in the Qur'anic verse stating that 'This Divine Writ – let there be no doubt about it – is a guidance for all the God-conscious who believe in the existence of that which is beyond the reach of human perception' (2:1-3). Asad comments as follows:

> *Al-ghayb* is used in the Qur'an to denote all those sectors or phases of reality which lie beyond the range of human perception and cannot, therefore, be proved or disproved by scientific observation or even adequately comprised within the accepted categories of speculative thought. Only a person who is convinced that the ultimate reality comprises far more than our observable environment can attain to belief in God, and, thus, to a belief that life has meaning and purpose

In his commentary on the first two verses of *Surat At-Takathur* in the Qur'an ('You are obsessed by greed for more and more until you go down to your graves'), Asad also draws attention to the damage wrought by 'the tendencies which have come to dominate all human societies in our technological age'. These verses, he notes, denote 'man's obsessive striving for more and more comforts, more material goods, greater power over his fellow-men or over nature, and

unceasing technological progress. A passionate pursuit of such endeavors, to the exclusion of everything else, bars man from all spiritual insight and, hence, from the acceptance of any restrictions and inhibitions based on purely *moral* values – with the result that not only individuals but whole societies gradually lose all inner stability and, thus, all chance of happiness'.

Not all 'isms' are necessarily negative, even though, as Sardar observes, there are many of them that 'have brought us to the edge of chaos'. The extent to which one sees any of them as relatively positive or negative of course depends on one's perspective, and our own preferences will inevitably emerge as our glossary expands. We will want to emphasize, for example, the positive role of pluralism and multiculturalism in the Integration of Knowledge. At the same time, we will need to question whether other '-isms' which tend to be demonized can be conceptualized in a more nuanced way. A good example is the word 'relativism', described in Chapter 3 as 'a useful bugbear of traditionalist ideologues and cultural supremacists, as well as some religionists, suggesting both chronic disorientation and moral laxity'. It is worth repeating here Jacques Barzun's reference to it as a 'bogey word', 'a cliché that stands for the cause of every laxity', and 'a slippery slope of cunning justifications and satanic whisperings, taking us further and further away from the certainty of eternal truths and absolute values'. As I suggested in response to Barzun's insight, the root of the word might be more usefully seen as 'a continuum ranging from a value-free "anything goes" mentality which may indeed be rootless in a negative sense, to a very positive ability to form "relationship", whether with ideas or with people'. Awareness of relativity and concern for relationship need not imply a degree of relativism that totally abolishes all immutable laws, eternal truths and absolute values. As Diana Eck, the Director of the Harvard Pluralism Project, points out, 'A thoughtful relativist is able to point out the many ways in which our cognitive and moral understandings are relative to our historical, cultural and ideological contexts' and, to that extent, the thoughtful relativist is a close cousin of the pluralist, someone who is able to relate to and engage in a positive and respectful way with

people of other communities and able to show how absolutism can give rise to bigotry.

In conceptualising the Integration of Knowledge project, Sardar navigates the related issues of ideology, relativism, and pluralism as follows:

> The overall aim here is to guard against ideological constructions of Islam as well as absolute relativism promoted so eagerly in postmodernist thought – and move towards some notion of plurality. The original French notion of ideology saw it as science of ideas and their truth and error but the term rapidly came to signify a total system of thought, emotion and attitude to humans, society and everything. Islamic movements, such as the Muslim Brotherhood and Jamaat-e-Islami, have often constructed Islam as an all-embracing ideology, a total and totalistic system that allows for no dissent, alternative perspectives, or plurality of any kind to flourish. Relativism is valuable when it promotes different viewpoints, perceptions and considerations, and even when it suggests that different views may not necessarily have absolute truth or validity. But it becomes a problem when it suggests, as in postmodernism, that there are no truths at all or nothing that can provide us with meaning.

In short, just as we might distinguish the creative world of ideas from the abstract constructs of ideology, we must also be aware of the potential trap of a brand of relativism which abolishes all stable meaning.

PROBLEMATIC TERMS IN TOPICAL DISCOURSE

It can hardly have escaped our notice that certain terms crop up again and again in political discourse and the media. Many of these are used as repetitive mantras, which can be either vacuous or loaded with implications. What, for example, is a 'moderate' Muslim'? What does it mean to be 'civilized'? What is 'terrorism'? What is 'the International Community'?

Let us take six examples of the way in which our glossary might deal with problematic terms: 'multiculturalism', 'pluralism', 'tolerance', 'integration', 'radical', and 'secularism'.

In recent years, some European leaders have lamented what they see as the 'failure' and even the 'death' of multiculturalism. This word, however (as briefly explained in Chapter 3) might refer to at least three different notions: first, the existence of plurality or diversity ('multiculturality'); second, the model of multiculturalism which promotes tolerance between separate communities within plural societies (sometimes referred to as 'plural monoculturalism'); and third, multiculturalism as an active process of constructive engagement between different communities (sometimes called 'interculturalism').

The phrase 'passive tolerance' has also been used to express disapproval of the 'plural monoculturalism' or 'cosmopolitanism' which tolerates the existence of 'minority' communities in separate enclaves but does not actively seek to 'integrate' them into wider society and promote 'social cohesion' through a common narrative or set of agreed national values. Furthermore, according to this view, 'passive tolerance' which turns a blind eye to 'extremist ideology' and the 'radicalization' it promotes should not just be disapproved of but actively countered. In other words, there should be 'intolerance of intolerance'.

While there may be many valid reasons to critique 'passive tolerance' it is nevertheless profoundly misleading to appear to suggest that multiculturalism in its critically important sense of active intercultural engagement is dead. Lack of care in distinguishing such concepts can have profoundly negative consequences not only for minority communities but also for wider society. After all, Anders Breivik, the Norwegian ideologue who killed 69 people in a mass shooting on the island of Utoya in 2011 was motivated by hatred of the multiculturalism which he saw as an assault on racial and cultural purity and which raised for him the hideous spectre of the 'Islamification' of Europe.

In advising us that we have been 'made into nations and tribes so that we may come to know one another' (49:13), the Qur'an itself

implies that we must go beyond the unchallenging mediocrity of mere tolerance and engage in active and open-heartened dialogue with other cultures. Now, we cannot truly know one another if our relationship with each other is little more than a kind of sullen tolerance, or in the words of Diana Eck 'a passive form of hostility', a 'shaky truce', or, as is sometimes the case, an 'expression of privilege'. Omid Safi reminds us that the connotations of 'tolerance' are deeply problematic. The root of the word comes from medieval toxicology and pharmacology, marking how much poison a body could 'tolerate' before it would succumb to death. He asks: 'Is this the best that we can do? Is it our task to figure out how many "others" we can tolerate before it really kills us? Is this the most sublime height of pluralism we can aspire to?' Like him, I don't want merely to 'tolerate' my fellow human beings, 'but rather to engage them at the deepest level of what makes us human, through both our phenomenal commonality and our dazzling cultural differences'. This is the process of seeing the self in the other, which Rumi describes in one of his discourses as integral to the attainment of wisdom, and which Abdulkader Tayob sees as integral to educational reform. The rejection of 'passive tolerance' can never merely be synonymous with 'intolerance of intolerance' but must include the higher ambition of active intercultural engagement.

All these considerations might prompt us, no matter what our ethnic, cultural or religious affiliation, to wish to define our own vision of multiculturalism and pluralism as going well beyond the bog standard of mere tolerance and aspiring to that level of mutual self-understanding and transformation. This involves a process of 'integration' which first and foremost refers to the personal integration which comes about through psychological, moral and spiritual development. After all, as the Qur'an tells us, *God does not change the condition of a people until they change what is in their inner selves* (13:11). In our political and media culture, the word 'integration', however, is often bandied about with an implied meaning which is little or no different from that of 'assimilation' which effectively means 'making something the same as something else'. Integration, on the other hand, comes from a root which gives us the words 'integer'

(whole or complete) and 'integrity'. To integrate is certainly to become a law-abiding and socially responsible citizen, but it is not to be cloned as someone else, totally absorbed into a monoculture, with all traces of one's own heritage extinguished.

As for the word 'radical', we have in Britain an honorable 'radical' tradition of reforming liberalism, intelligent social activism and legitimate dissent which has historically guided our national evolution towards a free, just and tolerant society, but 'radical Islam' and 'radicalisation' when applied to Muslims, invariably has the connotation of extremism, and even violent extremism. Yet, the sense of 'radical' as 'root and branch change' (Latin *radix*, root) or decisive and even drastic departure from customary norms need carry no necessary negative connotation when applied to other spheres. The remedy to counter 'radical Islam' is often proposed as being in the hands of 'moderate' Muslims, never in the hands of those who can reclaim a truly 'radical' vision of Islam which is in harmony with the underlying humanity of core Islamic principles and values. The final paragraph of the *Contextualising Islam in Britain II* report compiled by the University of Cambridge Centre of Islamic Studies for the Department of Communities and Local Government (DCLG) in 2012 frames this positive sense of radicalism:

> The excavation of the higher ethical principles by which the Islamic polity was constituted in its most original forms implies a vibrant and confident social activism in support of an open-ended and dynamic radical politics for the continued progressive transformation of our societies. A renewed Islamic public theology offers rich resources for a broad alliance of citizens to develop inclusive and collective responses to the many interconnected and deepening crises in the contemporary world.

In such a way, Muslims might aspire to be a creative minority within our societies to power such a vision. The fact that any reference to 'radicals' amongst them is invariably couched in terms of violence, extremism and fundamentalist religiosity is a telling example of the

one-sided distortion of terminology which our glossary needs to address.

Finally, the word 'secularism' is often bandied about with either strongly negative or positive connotations which reflect polarized ideological positions. Like 'relativism' and 'modernism' it can be demonized by religious traditionalists as the cause of every ill, and conversely it can be sanctified by ideologues as the source of all the benefits enjoyed by 'advanced' societies. Once again, we need to be clear about what kind of secularism we are talking about. We need to distinguish between 'procedural' and 'ideological' secularism. The former is sometimes also referred to as 'passive' and 'pluralist', and the latter as 'assertive' and 'corporatist'. Procedural secularism protects the equal rights of all citizens, while freely allowing religious citizens to participate fully and robustly in open debate in the public sphere. As such, it has brought many benefits to humanity, ensuring religious and political freedoms for minorities. Ideological secularism, on the other hand, attempts to exclude, marginalize or rigorously control religious voices and institutions in the public (and even the private) sphere.

The importance of procedural secularism in defending liberty of conscience was discussed in some depth in the first *Contextualising Islam in Britain* report (*Exploratory Perspectives*) compiled in 2009:

> There is a web of misunderstanding, not confined to Muslims, regarding the true origin, nature and intent of secularism. The core of the idea of the secular state is not anti-religious, for the historical separation of the powers of church and state in the West actually guaranteed the status of religion and the freedom of the church from state control, ensuring that neither should interfere in each other's domain of government. Secularism is therefore essentially a contract, ensuring religious freedom, tolerance and peace within a shared political space. An important aspect of the separation of powers is the fundamental principle of liberty of conscience, a principle ardently advocated by Martin Luther, the father of Protestantism. Insisting that God requires voluntary and sincere religious beliefs, Luther sets out the principle

that forbids human authorities from compulsion or coercion in matters of faith, since any such compulsion would render faith insincere. The role of the civil government is simply to maintain peace and order in society. The principle of liberty of conscience is absolutely in accord with the Qur'anic injunction that 'there shall be no coercion (*ikrah*) in matters of faith (2:256)'.

The term 'secular' comes from the Latin *saeculum,* which means 'this age' or 'the present time', and the concept refers to the condition of the world at this particular time or period or age. As argued in Chapter 3, 'it is precisely by recognising and understanding the condition of the world at this particular time that the challenge of religious and cultural pluralism can be met. This is not to give precedence to the temporal world over the spiritual world, nor to set one against the other, but to understand that human minds are conditioned differently in each age, and that tradition must be dynamically self-renewing and responsive to new conditions and new questions if it is to remain a living tradition. In other words, time, place and people cannot be ignored in the development of human understanding'. Whilst it is important to guard against modernism and secularism as uncompromising ideologies which are essentially inimical to the spiritual quest, it is equally important to take account of the reality of contemporary conditions and to remain open to discover what contemporary life has to offer in supporting that quest.

In relation to education, it is often held that 'secular' education systems provide a 'neutral' space which guards against religious 'indoctrination'. It can be argued, however, that all education systems are based on particular conceptions of human nature, faculties, ideas and beliefs, even if underlying ideologies may not be made explicit. It has been claimed that in the wider context of the debate about faith schools, secular schools (as opposed to faith schools) are not ideologically free zones. Secularism as an ideology has its own assumptions about the human person, the ideal society, the ideal system of schooling and the meaning of human existence. While these assumptions may not be formally codified into a curriculum subject designated 'secular

education' as an alternative to 'religious education' it can be argued that they characteristically permeate the ethos and culture of state-provided secular schools and form a crucial part of the hidden curriculum.

'Secularism', like the other problematic terms identified here, is a good example of a loaded term which we need to navigate with care, taking due account of all its connotations. While we might well agree with Ibn Rushd that we should respect the different uses of the same word because they represent different points of view and show how it is possible for one thing to be described in a variety of ways, we also need to take fully on board Francis Bacon's insight that understanding is not only hindered by the common definition of words but also (even among the more learned) by disputes over their multiple meanings. And it is this fundamental problem which drives our intention, as Sardar puts it, to define a set of key terms in our own specific way and incorporate them within the Integration of Knowledge discourse.

In conclusion, I offer a model entry for the proposed glossary of key terms, the work in progress identified by Sardar as 'a tool for developing a more nuanced understanding of indispensable terms and concepts that become the building blocks of the Integration of Knowledge discourse'. The entry chosen is the one on EXCELLENCE, for it expresses very well the intention not only to develop that nuanced understanding derived from etymological, historical, inter-cultural and inter-faith exploration of this important word, but also to arrive at a meaning that is consistent with the navigational principles I have endeavored to define in this essay and which enable us to set our own course.

EXCELLENCE: A MODEL ENTRY FOR THE PROPOSED
GLOSSARY OF KEYWORDS

While there is a tendency in recent times to frame the concept of excellence in terms of outstanding personal achievement or performance, the word has a much deeper underlying range of meanings,

encompassing not only outstanding mastery of a domain of knowledge and/or skills (and the success and eminence that confers) but also the attainment of moral virtue. In short, in its fullest sense, the word connotes not only being 'good at' something, but also being 'good at something intrinsically good', and this composite sense is conveyed in the definition in the Oxford Dictionary: 'possession chiefly of good qualities in an eminent or unusual degree; surpassing merit, skill, virtue, dignity, eminence'.

Excellence is therefore much more than what is implied by 'professionalism', or 'accomplishment'. After all, we can talk about an accomplished fraudster or a professional hit man, but would it not be rather strange to say that Mario is an excellent hit man, unless we were members of the Mafia? The difference is that the heart of excellence is not simply about personal mastery, or effectiveness in accomplishing a task, but includes excellence of human character, and that has a moral and ultimately a spiritual dimension. There is evidence from the world of sport that amateurs often have much better ethical values than professionals, probably because their objective is not typically to win at all costs. Nevertheless, the close association between professionalism and excellence (in one sense of being the 'best') is widespread in statements of business principles and is included in those of the investment banker Goldman Sachs: 'We take great pride in the professional quality of our work: We have an uncompromising determination to achieve excellence in everything we undertake. Though we may be involved in a wide variety and heavy volume of activity, we would, if it came to a choice, rather be best than biggest'. What this means in practice may perhaps be judged by the resignation in 2012 of Greg Smith, from the company. Smith, an executive director and Head of US equity derivatives businesses in Europe, the Middle East and Africa, attributed his decision to resign to the 'decline in the firm's moral fiber' and its 'toxic and destructive' culture which attached far more importance to making as much money as possible out of clients than taking care of clients' interests with integrity.

The reclamation of the full scope and standing of excellence is also of particular importance at a time when it has become little more than

a mere buzzword in educational discourse. Kathryn Allan describes the process by which an element (or elements) of the meaning of a word is lost, weakened or 'bleached' over time. This semantic entropy is a common feature of semantic change, especially with positive terms. How often do we hear words like 'brilliant' or 'fantastic' to describe trivial accomplishments. A striking example is the word *cunning*, which now has the sense of 'skilfully deceitful' or 'crafty' (from the 16th century), but originally had the sense of 'learned'. Its root also links ability and knowledge in such derivations as *can* and Scots *ken*, 'know'. In this case, the driver of change might well have been the influence of the church in stigmatising all knowledge and skills derived for pagan sources as the work of the devil, and hence 'devious'. Ideological, cultural and institutional factors clearly play an important role in shifting the meanings of words over time, and we need to be very alert to these influences.

Allan argued in 2007 for the status of excellence as a modern 'keyword' not only because of its 'semantic ambiguity' but also because it offers access to 'current perspectives' in an important area of culture and society. It can be argued that this status is now warranted more than ever. Allan reports an 86% increase in the use of the term in educational journals in the JSTOR collection in the twenty years from the period 1976-1980 to 1996-2000. The increasing prominence of the word in modern educational discourse and in the mission statements churned out by educational institutions and government initiatives has attracted a degree of ridicule by some commentators on education. In his book suggestively entitled *The University in Ruins*, Bill Readings refers to the current usage of the word 'excellence' as an 'empty notion', and Allan refers to the opinion of another commentator that the frequency with which the word is used by a university in promotional materials is an indicator of whether that institution is third-rate. She also reveals that only four out of 21 randomly selected British universities (a mixture of pre- and post-1992 institutions, including both Russell Group members and ex-polytechnics) do not use the word excellence (or its relatives like excellent and excel) in their mission statements.

Many argue that this reduction of excellence to a buzzword, or, at worst, to meaningless mantra, is the inevitable outcome of a competitive, market-led university recruitment and evaluation system geared to massively increased enrolment. With government funding increasingly linked to the demonstrable ability of universities to 'deliver' standards, meet quantifiable targets and provide evidence that they are doing so, traditional internal methods of quality assurance and accountability for reliably maintaining established standards are under increasing pressure from the oppressive and elaborate 'systems' embedded in rampant managerialism. This can not only stifle creativity, original thought, and diverse insights, and the like, but also create a culture of uniformity, compliance and mediocrity in which inspired leadership cannot flourish. There is mounting concern, as noted by Allan, that 'changes in teaching practice and assessment have not upheld the level of quality that was previously the norm in universities'. As Morley notes, 'in the age of global capitalism universities have been reduced to a technical ideal of performance within a contemporary discourse of excellence'.

The restriction and even debasement of meaning entailed in that contemporary discourse can best be challenged by recapturing not only its sense of genuinely outstanding mastery but also its somewhat forgotten moral dimension. To do so, a look at the root of the word is the most fertile starting-point. Its underlying sense is of physically 'rising above' others. It came into English via Old French from Latin *excellere*, 'to rise above, raise up, elevate, be eminent', formed from *ex* -(out) + the hypothetical verbal element *cellere*, assumed to mean something like 'rise, be high'. The source of the Latin word is the Indo-European base *kol-* or *kel-*, 'be prominent', which also produced English *column*, *culminate*, and *hill*, although in Latin the metaphorical sense of *excellere* as being 'outstanding' superseded its concrete physical sense at an early stage. Including the word *colonel* (leader of a column) in his list of derivations from the root, Shipley notes that in the southern states of America in the 19th century, any gentleman over forty was addressed as 'colonel'. Though apparently a rather quaint reference, this is of unexpected significance in the light

of the verse in the Qur'an which refers to 'man' (Arabic *insan*, and hence denoting both men and women) attaining maturity at the age of forty (46:15). Muhammad Asad comments that the age of forty is here identified as 'the age at which man is supposed to attain to full intellectual and spiritual maturity', as also indicated by the fact that it was the age at which the first revelations came to the Prophet Muhammad. The point here is not any literal or automatic significance attached to the age itself but the important idea within the Islamic conception of human development that human excellence is intertwined with intellectual and spiritual maturity.

It is revealing here to probe the meaning of the Greek word *areté*. Usually translated, as 'virtue', it was nevertheless not a specifically moral term. It was used to refer not only to human skills but also to inanimate objects, natural substances and domestic animals. A good knife had the virtue (*areté*) of being able to cut well 'by virtue of' its sharpness. The term denoted any sort of excellence, distinctive power, capacity, skill or merit, rather like Latin *virtus*, which, like the Greek, also had the sense of bravery and strength. The Italian word *virtuoso* preserves the sense of exceptional skill. The connotation of excellence in the word *areté* also comes through in the related word *aristokratia*, 'rule by the best people'. Such an ideal need not be equated with its debased realization in the form of government in which power is held by a hereditary ruling class of aristocrats or other privileged 'elite' rather than by people of real merit or, indeed, by people elected or formally chosen in line with the original meaning of the word 'elite' from Latin *electus*, 'chosen'.

Useful convergence can be found here with Confucian ethics, in which the most frequently discussed ideal is that of the *junzi* (or *chun-tzu*). David Wong explains that the Chinese word originally meant 'son of a prince', a member of the aristocracy, 'but in the *Analects* of Confucius it refers to *ethical* nobility. The first English translations rendered the term as 'gentleman' but the more appropriate terms 'superior man' or 'exemplary person' have been suggested in more recent times. Wong also notes that 'before Confucius's time, the concept of *ren* referred to the aristocracy of bloodlines, meaning

something like the strong and handsome appearance of an aristocrat. But in the *Analects* the concept is of a moral excellence that anyone has the potential to achieve'. He adds that the sense of *ren* as 'all-encompassing moral virtue' is explicitly conveyed by some translators through use of the translation 'Good' or 'Goodness', although it is also commonly translated as 'benevolence' or 'humaneness'. It might be noted here that the Prophet Muhammad's s reaction to boasts of ancestral glory was to warn those steeped in the arrogance of pre-Islamic pagan ignorance (*jahiliyyah*) that Islam had abolished such tribalism ('*asabiyyah*), and that all human beings are descended from Adam. The Qur'an (49:13) advises that there is no superiority of one over another except in *taqwa*, that consciousness of God which inspires us to be vigilant and to do what is right.

Homer often associates *areté* with courage, but more often with effectiveness. The person of *areté* uses all their faculties to achieve their objectives, often in the face of difficult circumstances, hardship or danger. One heroic model is Odysseus, not only brave and eloquent, but also wily, shrewd and resourceful, with the practical intelligence and wit (in the sense of quick thinking) of the astute tactician able to use a cunning ruse to win the day. Although the Latin word *virtus* comes from *vir*, 'man' (source of *virility* or manliness), itself originally from the Indo-European base *wi-ro*, 'man', Homer uses the word *areté* to describe not only male Greek and Trojan heroes but also female figures, such as Penelope, the wife of Odysseus, who embodies *areté* by showing how misfortune and sorrow can be stoically endured to an excellent degree. Such is the virtue of *sabr* (patient endurance) in Islamic tradition, in the same way as the aesthetic sense of refinement the Greeks also associated with *areté* converges at one level with that of *ihsan*, 'doing what is good and beautiful', behaving in an excellent manner'. In Islamic ethics and spirituality, *ihsan* embraces the aesthetic, moral and spiritual dimensions of a beautiful and virtuous character (*akhlaq* and *adab*). In the same way, the concept of 'beauty' expressed by the word *husn* encompasses not only the aesthetic sense of beauty in its homage to the 'due measure and proportion' with which all of creation is endowed by the Creator, but also the

intimate equation between what is beautiful and what is good. Beauty is thus inseparable from the attributes of Divine Perfection, and from the goodness, moral virtue, spiritual refinement and excellence of character which are the human reflections of those holy attributes. This integrated and elevated conception of beauty is fundamental to a proper understanding of what is meant by excellence in the domain of aesthetics.

In the original Greek of the New Testament, *areté* is included in the list of virtues for cultivation in Christian moral development, and is associated primarily with the moral excellence of Jesus. It figures in the celebrated 'Admonition of Paul' in *Philippians* 4:8, 'Finally, brethren, whatever is true, whatever is honourable, whatever is just, whatever is pure, whatever is lovely, whatever is gracious, if there is any excellence (*areté*), if there is anything worthy of praise, think on these things'. Other virtues in the New Testament include faith, knowledge (*gnosis*), godliness (*eusebeia*), brotherly affection (*philadelphia*), the highest form of love (*agape*) as the love of God for man and man for God, self-control (*enkrateia*) and steadfastness (*hypomone*).

Returning to the field of education, John Terry, in a book entitled *Moral Education*, provides an example of the right balance between the pursuit of knowledge and the attainment of goodness and 'noble character'. This balance was the avowed aim of the founders of Philips Exeter Academy in New Hampshire. In the original *Deed of Gift* of 1781, John Phillips wrote: 'But above all, it is expected that the attention of instructors to the disposition of the minds and morals of the youth under their charge will exceed every other care; well considering that though goodness without knowledge is weak and feeble, yet knowledge without goodness is dangerous, and that both united form the noblest character; and lay the surest foundation of usefulness to mankind'. Yet, as Terry points out in relation to contemporary education, 'Most secondary schools do much better in knowledge than in goodness – particularly those engaged in the uncompromising pursuit of academic excellence'. Although he is referring here to the situation in America, an incomplete and often one-sided view of excellence is widespread (though in different ways) in educational

systems at all levels and in all societies. In the UK, for example, in line with the statutory requirements of the National Curriculum, 'moral and spiritual development' is often specified on school mission statements as an essential component of a broad and balanced curriculum, an indispensable dimension of its commitment to 'delivering' excellence. In reality, it may often receive little more than lip service. As for Muslim societies, it hardly needs repeating that deficits in knowledge production, independent inquiry, and critical thinking are repeatedly lamented, with the establishment of 'centres of excellence' often regarded as an important element in any strategy for educational reform.

If 'higher education' is to be truly 'higher' (and thus reflect the original etymological sense of excellence as 'elevated' or 'rising above others'), we might endorse the view of the University of Oxford Institute for the Advancement of University Learning that 'higher education and higher learning' entail 'the pursuit of higher-order cognitive capabilities in the context of disciplinary knowledge'. However, it needs to be noted that such a vision is normally framed as an essentially 'cognitive' endeavor entailing the development, above all, of intellectual powers, with little, if any, reference to moral or spiritual development. For instance, the UK Council for National Academic Awards (now defunct) conceives of excellence within a model of 'higher learning' which values the development of 'understanding', 'independent judgement', 'problem-solving skills', 'an enquiring, analytical and creative approach' and 'critical self-awareness'. The importance of all of this can hardly be denied, and we might take it even further by endorsing Roland Barnett's contention that 'genuine higher learning' is necessarily 'subversive' and 'unsettling', because the student comes to see that things could always be other than they are, and 'there are no final answers'. Intellectual excellence is therefore embodied in one form in the philosophical, social and moral critic who asks difficult and relentless questions, even to the extent of being perceived as a dangerous freethinker. The truly visionary thinker, the one capable of bringing that degree of illumination which can transform lives and change the world for the better is operating at a level

of 'intellect' which is not merely 'rational' or 'logical' (Latin *ratio*, Greek *dianoia*) but capable of insight arising from reflection and contemplation (*tafakkur*) and other higher intellectual, intuitive and moral faculties denoted by the Arabic term *'aql* and also by the Greek term *nous*. Aristotle connects happiness (*eudaemonia*), as an activity of the soul, with *areté*, of which the highest realization is the contemplative life (*theoria*). He also equates *areté* with the 'mean' between excess and defect, a principle which converges with the Qur'anic description of Muslims as 'a community of the middle way' (2:143) and one which is central to Al-Ghazali's exposition of Islamic ethics.

Abdelwahab El-Affendi affirms that institutions of higher education have a pivotal role in ensuring that the production of knowledge does not become divorced from the higher values of society:

> As specialisations evolve, students tend to concentrate on minute details of their particular field, and may lose sight of overall objectives, guiding principles and interdisciplinary connections. Already in ancient Athens the so-called 'Sophists', the first dedicated professional teachers, were being satirised as unprincipled seekers of utility. Like modern day lawyers, they became notorious for teaching the skills of winning an argument, regardless of the intrinsic value of the position staked. At the time of Abu Hamid al-Ghazali (d.1111), similar accusations were being made against professional jurists (*fuqaha*), reputed to seek lucrative employment and gain at the expense of lofty Islamic values. Regrettably, this remains a hazard even today.

The failure of even the most prestigious universities to promote excellence in the full sense of the word has been highlighted in *Excellence Without a Soul*, a critique of Harvard College by its former Dean, Harry Lewis. Reviewing this work, David Melleby relates how many scholars and experts believe that higher education in America is in crisis. 'For better or worse, Harvard is looked to as one of the premier colleges in America and around the world'. Yet, 'according to Lewis, colleges in America (Harvard included) have forgotten that the fundamental job of undergraduate education is to turn teenagers into

adults, to help them grow up, to learn who they are, to search for a larger purpose for their lives, and to leave college as better human beings. Lewis believes that because colleges have failed to offer students reasons for education – which forces students to wrestle with deeper questions of meaning and purpose – they are failing students and a country that desperately needs a well-educated citizenry. Lewis pleads with colleges and universities to not be afraid to talk about truth, meaning, purpose and what it means to be human'. In his own words: 'The old ideal of a liberal education lives on in name only. No longer does Harvard teach the things that will free the human mind and spirit'.

The mention of freedom here might also remind us that with so much emphasis in management-speak on 'delivering' policies and practices, the word *deliver* is actually derived from Latin *de-liberare*, meaning to 'set free'. Excellence in education entails the 'liberation' or 'deliverance' of the full range of human faculties and capacities, yet teachers are increasingly required to 'deliver' a prescribed curriculum or a policy. There is a need to resist not only the kind of language which reduces education to a kind of soulless managerialism, but also the kind of language which equates education with the postal service. Are teachers only there to 'deliver' programmes of study, as if they were pre-packaged one-way parcels, mere items of content to be transmitted into letter-box brains? A complete, comprehensive and integrated concept of education requires that the teacher is not only responsible for the instruction and training of the mind and the transmission of knowledge (*ta'lim*) but also with the education of the whole being and the nurturing of the soul (*tarbiyah*), the cultivation of moral discipline (*ta'dib*), and how to learn from one another in the spirit of critical openness and respect for diversity (*ta'aruf*).

To that end, the best education in all societies, the real measure of excellence, is the degree to which it addresses the totality of human faculties. It is nothing more nor less than the full realization of human potential. It can be discerned in the earliest Greek conception of *areté* as the fulfillment of purpose or function; and it comes through in many forms and ways in the wider cultural and linguistic landscape

we have traversed. Aspects of excellence have been realized in all societies and at all times, and no culture or civilization has ever had a monopoly, even if some have attained to relative eminence in certain fields. That is surely why the Qur'an advises us to 'vie with one another in doing good works' (2:148, 5:48) and to realize that we have been made into nations and tribes 'so that we may come to know one another' (49:13). The attainment of excellence is a cumulative process which depends on the sharing of knowledge and skills, and on the respect for higher knowledge wherever it may be found.

CITATIONS

In explaining the origin of certain English words, including their Indo-European roots, I have referred to various sources, including John Ayto, *Dictionary of Word Origins* (London: Bloomsbury Publishing, 1990); *Chambers Dictionary of Etymology*, ed. Robert K. Barnhart (Edinburgh: Chambers, 1988); Joseph T. Shipley, *The Origins of English Words: A Discursive Dictionary of Indo-European Roots* (John Hopkins University Press, 1984); and *The American Heritage Dictionary of Indo-European Roots*, ed. Calvert Watkins (Boston: Houghton Mifflin Company, 2000). On the etymology of the word 'Babel', Ayto points out that 'the word has no etymological connection with language or noise. The original Assyrian *bāb-ilu* meant "gate of god" and this was borrowed into Hebrew as *bābel*'. The later Greek version of the name is *Babylon*. Popular etymology, however, links the word to a similar Hebrew root *balal*, 'confusion' or 'mixing'. Chambers *Dictionary of Etymology* observes that the English word *babble*, which folk etymology has connected with Babel and thus probably influenced its sense of 'meaningless or confusing chatter or prattle', does have a direct connection with language, in that 'the various forms of this word in Indo-European languages are all probably formed on the repeated syllables *ba*, *ba*, or *bar*, *bar*, sounds typically made my infants and used to express childish prattle'. 'Adam to *Confusio Linguarum*' is the title of the first chapter of Umberto Eco's *The Search for the Perfect Language*, translated by James Fentress

(London: Fontana Press, 1997). His quotation from Jürgen Trabant is *from Apeliotes, oder der Sinn der Sprache* (Munich: Fink, 1986).

On the Qur'anic basis of religious pluralism I have referred to Mahmoud M. Ayoub, 'The Qur'an and Religious Pluralism', in *Islam and Global Dialogue, Religious Pluralism and the Pursuit of Peace*, ed. Roger Boase (Aldershot: Ashgate, 2005), p.273; Khalid Abou El Fadl, *The Place of Tolerance in Islam* (Boston: Beacon Press, 2002), p.16; and Ziauddin Sardar, *Reading the Qur'an* (London: Hurst, 2011), p.91, pp.235-240. See also Reza Shah-Kazemi, 'The Metaphysics of Interfaith Dialogue: Sufi Perspectives on the Universality of the Qur'anic Message', in *Paths to the Heart: Sufism and the Christian East*, ed. James Cutsinger (Bloomington, IN: World Wisdom, 2002). Rabbi Abraham Heschel's affirmation of the creativity inherent in human diversity is quoted by Prince Hasan Bin Talal in his Introduction to *Talking to the Other: Jewish Interfaith Dialogue with Christians and Muslims* by Rabbi Jonathan Magonet (London: I. B. Tauris, 2003), p.vii. I have also referred to *Progressive Muslims on Justice, Gender and Pluralism*, ed. Omid Safi (Oxford: Oneworld Publications, 2003), p.24, and Diana Eck, *Encountering God* (Boston: Beacon Press, 1993), p.192, p.198, as well as three of my own published papers: Jeremy Henzell-Thomas, 'The Challenge of Pluralism and the Middle Way of Islam', in *Islam and Global Dialogue: Religious Pluralism and the Pursuit of Peace* (op. cit); 'Beyond the Tower of Babel: A Linguistic Approach to Clarifying Key Concepts in Islamic Pluralism', in *Citizenship, Security and Democracy: Muslim Engagement with the West*, ed. Wanda Krause (Richmond: AMSS UK, 2009). This paper was originally delivered as a keynote address on 3rd September 2006 at an international conference in Istanbul organized by the AMSS UK and the Foundation for Political, Economic and Social Research (Turkey) in conjunction with AMSS USA and AMSS France; and thirdly, 'British and Muslim: Holding Values to Account through Reciprocal Engagement', *Arches Quarterly* (Spring, 2011), pp.30-43.

I have also incorporated some material from three other keynote addresses: 'Babel Revisited', international conference on the Reform

of Higher Education in Muslim Societies, organized by the International Institute of Islamic Thought (IIIT) and the Faculty of Theology, University of Istanbul, 18th-19th March, 2016; 'The Good Word', 2nd postgraduate symposium on Muslims in the UK and Europe, Centre of Islamic Studies, University of Cambridge, 29th May 2015; and 'The Power of the Word', annual winter gathering of the Muslim Institute, Old Sarum, Salisbury, UK, 29th November, 2015. Reference has also been made to two of my recent essays for *Critical Muslim*: 'The Power of Education', issue 14, 'Power' (Hurst, 2015), pp.65-86, and 'The Integration We Seek', Introduction to *Critical Muslim*, 'Educational Reform', issue 15 (2015), an updated version of which constitutes Chapter 3 of this publication. The story of Jason and the Argonauts is from my 'Passing Between the Clashing Rocks: The Heroic Quest for a Common and Inclusive Identity', *Pastoral Care in Education*, Special Edition: *Faith, Feeling and Identity*, 22:3 (2004), pp.35-43. The version of the myth quoted is from A. K. Coomaraswamy, 'Symplegades', in *Essays in the History of Science and Learning Offered in Homage to George Sarton on the Occasion of his Sixtieth Birthday*, ed. M. F. Ashley Montagu (New York: Henry Schuman, 1946).

Quotations from the Qur'an are from Muhammad Asad, *The Message of the Qur'an* (Bath: The Book Foundation, 2003; 1st edition Gibraltar: Dar Al-Andalus, 1980). His comments on the Qur'anic roots of 'the spirit of intellectual curiosity and independent inquiry' are from his Foreword to that work, p.vi. Other comments by Asad include quotations from his notes on Surahs 2, 20, 41, 96 and 102. Edward William Lane's monumental *Arabic-English Lexicon* was first published in 1863 by Williams and Norgate, London.

On the Proportioned Script of Ibn Muqla, see Ahmed Moustafa and Stefan Sperl, *The Cosmic Script: Sacred Geometry and the Science of Arabic Penmanship* (London: Thames and Hudson, 2014), and Jeremy Henzell-Thomas's Epilogue to this work (pp.626-659).

The story of the traveller and the grapes is from Jalaluddin Rumi, Mathnawi, II, 3681 ff.

For a detailed study of *'aql*, see Karim Douglas Crow, 'Between

wisdom and reason: Aspects of *'aql* (Mind-Cognition) in Early Islam', *Islamica* 3:1 (1999), pp.49-64.

For Al-Niffari's reflections on the 'letter', see *The Mawaqif and Mukhatabat of Muhammad Ibn 'Abdi 'l-Jabbar al-Niffari*, translated and edited by A. J. Arberry (Cambridge: CUP, 1935) pp.111-116. Ibn 'Arabi's concept of continually unfolding implications is from the chapter of *al-Futuhat al-Makkiyya* concerning 'the people of spiritual bewilderment' (*hayra*), trans. James Winston Morris in his *The Reflective Heart: Discovering Spiritual Intelligence in Ibn 'Arabi's Meccan Illuminations* (Louisville: Fons Vitae, 2005), p.81.

For Ziauddin Sardar's thoughts on causal layered analysis (CLA) and discourse analysis see his *Future: All That Matters* (London: Hodder and Stoughton, 2013), pp.97-101. See the same chapter for his thoughts on Orientalism, and for a more detailed discussion, his *Orientalism* (Buckingham: Open University Press, 1999). His thoughts on the purpose and form of a glossary to shape a new discourse are set out in *From Islamization to Integration of Knowledge*, the second chapter of this book. As he explains in that essay, its function is 'to synthesise our extensive deliberations on reform of higher education in the Muslim world; and present a more coherent picture of our arguments and positions'.

The quotations from Francis Bacon's *Novum Organum* (1620) are largely from Aphorism LIX. An accessible version of this work is the one translated and edited by Peter Urbach and John Gibson (Illinois: Open Court, Chicago & La Salle, 1994). I also consulted Manly P. Hall, 'The Four Idols of Francis Bacon & The New Instrument of Knowledge' at http://www.sirbacon.org/links/4idols.htm (accessed 18/06/2015) and the Wikipedia entry on *Idola fori* ('Idols of the Marketplace') at https://en.wikipedia.org/wiki/Idola_fori (accessed 19/6/2015). *The Four Idols* (from *Novum Organum*) appears in *Plato's Heirs: Classic Essays*, ed. James D. Lester (Lincolnwood: NTC Publishing Group, 1996), pp.53-63. Bacon's *Meditationes Sacrae* (1597) can be read in a facsimile edition published by Kessinger Publishing Co., 1996 and 2010. I have referred to http://www.muslim philosophy.com/ir/art/ibn%20rushd-rep.htm (accessed 03/07/2015)

for Ibn Rushd's views on language. The reference to Ivanov's point about the richness of linguistic diversity is from Vjačeslav Ivanov, 'Reconstructing the Past', *Intercom* 15:1 (1992), pp.1-4.

On dialectic as an advanced mode of human thought, see Karl Riegel, 'Dialectic Operations: The Final Period of Cognitive Development', Human Development, 16:5 (1973), and James Fowler, *Stages of Faith: The Psychology of Human Development and the Quest for Meaning* (San Francisco: Harper and Row, 1981). For an Islamic educational perspective on the role of dialectic see Zahra Al Zeera, *Wholeness and Holiness in Islamic Education* (Herndon: IIIT, 2001), and the Foreword to this book by Jeremy Henzell-Thomas. The research by the University of Chicago which revealed the role of group discussion in distinguishing truth from falsehood was referred to by the Rt. Reverend Graham James, Bishop of Norwich, in 'Thought for Today' on BBC radio 4 on 29/05/2015. *Tetralogue* is by the philosopher Timothy Williamson and published by Oxford University Press (2015). On *adab al-ikhtilaf*, see Taha Jabir Fayyad 'Alwani, *The Ethics of Disagreement in Islam*, English translation of *Adab al Ikhtilaf Fil Al Islam* by Abdul Wahid Hamid (Herndon: IIIT, 1993). See also the section entitled 'Respectful Disagreement' in *Contextualising Islam in Britain II* (Centre of Islamic Studies, University of Cambridge, 2012), p.66.

On narrative fallacies, see the references to Nassim Nicholas Taleb and Daniel Kahneman in Chapter 2. The same chapter also includes the reference to Jean Gebser's description of structural changes in human consciousness.

Costas Gabrielatos's analysis of collocations in the field of corpus linguistics was included in his keynote lecture at the Postgraduate Symposium on Muslims in the UK and Europe at the Centre of Islamic Studies, University of Cambridge, 17th May 2014. For a critical analysis of Dinesh D'Souza's *The End of Racism* (The Free Press, 1995) see Teun A. Van Dijk, *News as Discourse* (Hillsdale, NJ: Lawrence Erlbaum, 1988).

For Al-Ghazali's exposition of Islamic ethics based on the Golden Mean, see Tim Winter's translation of Books XXII and XXIII of Al-

Ghazali's *Ihya 'ulum al-din* (*Revival of the Religious Sciences*): *Kitab Riyadat al-nafs*, 'On Disciplining the Soul', and *Kitab Kasr al-shahwatayn*, 'On Breaking the Two Desires' (Cambridge: Islamic Texts Society, 1995), pp.21-22. 'Alija 'Ali Izetbegovic discusses the 'middle way' with reference to Roger Bacon in his *Islam Between East and West* (Indianapolis: American Trust Publications, 1994), pp.271-286.

On the concepts of *junzi* and *ren* in Confucian ethics, see David Wong, 'Chinese Ethics', in *The Stanford Encyclopedia of Philosophy* (Spring 2013 Edition), ed. Edward N. Zalta, accessed at http://plato. stanford.edu/entries/ethics-chinese/.

The distinction between 'freedom' and 'liberty' was made in a letter to *The Independent* on 10th August, 2004, by Bert Hornback, Emeritus Professor of English at the University of Michigan. The misuse of the term 'relativism' is highlighted by Jacques Barzun, *From Dawn to Decadence. 1500 to the Present: 500 Years of Western Civilisation* (London: HarperCollins, 2001), pp.760-61. For the application of Rumi's insights to educational reform, see Abdulkader Tayob, 'Reforming Self and Other', *Critical Muslim*, 'Educational Reform', (issue 15, 2015). For the distinction between ideological and procedural secularism see successive reports by the Centre of Islamic Studies, University of Cambridge: *Contextualising Islam in Britain: Exploratory Perspectives* (2009), p.28, and *Contextualising Islam in Britain II* (2012), op. cit., p.94. Martin Luther's ideas on liberty of conscience are from his *On Secular Authority: To What Extent It Should Be Obeyed* (1523). The hidden curriculum of secular ideology embedded in the education system is discussed in G. G. Grace, *Catholic Schools: Mission, Markets and Morality* (London: Routledge-Falmer, 2002), p.14.

The model entry on *Excellence* for the keyword glossary was one of five terms included in Jeremy Henzell-Thomas, *Towards an Expanded Glossary of Key Terms: Introduction and Five Model Entries* (IIIT, 2016). The distinction between professionalism and excellence was made by Jeremy Henzell-Thomas in a keynote address entitled 'Islam and Human Excellence' at Goldman Sachs, London,

30th September 2010. Goldman Sachs's business principles can be accessed at http://www.goldmansachs.com/who-we-are/business-standards/business-principles/index.html. Greg Smith's statement on why he resigned from the company was reported in the *New York Times* on 14th March, 2012 and can be accessed at http://www.nytimes.com/2012/03/14/opinion/why-i-am-leaving-goldman-sachs.html.

On the weakening and 'bleaching' of the term *excellence* in educational discourse, see Kathryn L. Allan, 'Excellence: A New Keyword for Education?' *Critical Quarterly*, 49/1 (Spring 2007), pp.54-78. The author's pre-final copy of this article can be accessed at http://keywords.pitt.edu/pdfs/excellence.pdf. See also http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8705.2007.00749.x/abstract. See also B. Readings, *The University in Ruins* (Cambridge, MA: Harvard University Press, 1996), 39; L. Morley, 'The Micropolitics of Quality', *Critical Quarterly* 47:1-2 (2005), p.84.

On the changing meanings of the word elite, see the entry for this word in Raymond Williams, *Keywords: A Vocabulary for Culture and Society* (London: Fourth Estate, 2014), p.110 (first published by Fontana, London in 1976).

On the Greek word *areté* I have found useful material in Andrew Lawless, *Plato's Sun: An Introduction to Philosophy* (Toronto: University of Toronto Press, 2005) and Michael Pakaluk, *Aristotle's Nicomachean Ethics: An Introduction* (Cambridge University Press, 2005), p.5. On Odysseus's shrewdness, see Jeffrey Barnouw, *Odysseus, Hero of Practical Intelligence: Deliberation and Signs in Homer's Odyssey* (Lanham, Maryland: University Press of America Inc., 2004), p.250.

On virtues included in the New Testament, see Allen Verhey, *The Great Reversal: Ethics and the New Testament* (Grand Rapids, Michigan: William B. Eerdmans Publishing Co., 1984), p.141.

On the balance between 'knowledge and goodness', see Charles L. Terry, 'Moral Education', in *Respecting the Pupil: Essays on Teaching Able Students*, ed. Donald B. Cole and Robert H. Cornell (Exeter, NH: Phillips Exeter Academy Press, 1981), pp.112-113. Abdelwahab

El-Affendi's views on the importance of values in the sphere of higher education are from his essay 'Thinking of Reconfiguration', *Critical Muslim*, 'Educational Reform', issue 15, (Hurst, 2015), pp.49-50. For Harry Lewis's critique of Harvard College, see *Excellence Without A Soul: Does Liberal Education Have a Future?* (PublicAffairs, 2007) and the review by Derek Melleby on the CPYU (Center for Parent/Youth Understanding) website.

The vision of higher education articulated by the Oxford University Institute for the Advancement of University Learning can be accessed at http://www.learning.ox.ac.uk/media/global/wwwadminoxacuk/localsites/oxfordlearninginstitute/documents/supportresources/lecturersteachingstaff/resources/resources/Higher_Education_and_Higher_Learning.pdf.

The Reform of Higher Education in Muslim Societies is in sum a paradigm shift in perspective driven by important considerations including the aims of education itself. It may require reforming existing disciplines, inventing new ones, as well as working in conjunction with current knowledge(s) and discourses by taking effective account of the ethical, spiritual norms of Muslim society, the guiding principles that it operates under, which in turn mark the underlying basis of its makeup and spiritual identity. Rather than creating divisions, reform of Higher Education in Muslim Societies recognizes the plurality and diversity of the modern networked world, and seeks to replace sterile and uniform approaches to knowledge with a broader and more creative understanding of reality as lived on different soils and different cultures. Moderation, balance and effective communication are paramount features of the underlying philosophy.

ZIAUDDIN SARDAR

Ziauddin Sardar, writer, broadcaster, futurist and cultural critic, is an internationally renowned scholar and public intellectual. Formerly, Professor of Law and Society at Middlesex University, he is author of over 50 books, including *Reading the Qur'an*; and *Mecca: The Sacred City*, and two volumes of the highly acclaimed autobiography: *Desperately Seeking Paradise* and *Balti Britain: A Provocative Journey Through Asian Britain*. Two collections of his writings are available as *Islam, Postmodernism and Other Futures: A Ziauddin Sardar Reader* and *How Do You Know? Reading Ziauddin Sardar on Islam, Science and Cultural Relations*. Professor Sardar has worked as a science journalist for *Nature* and *New Scientist*, as reporter for London Weekend Television and Channel 4 and has made numerous television and radio programmes, including *Battle for Islam*, a documentary for the BBC. A former columnist on the *New Statesman*, and long-standing Editor of the monthly journal *Futures*. Currently, he is Editor of the quarterly magazine *Critical Muslim*, and Director of the Centre for Postnormal Policy and Futures Studies.

JEREMY HENZELL-THOMAS

Jeremy Henzell-Thomas is a Research Associate (and former Visiting Fellow) at the Centre of Islamic Studies at the University of Cambridge. A Fellow of the Royal Society of Arts, and a member of the executive committee of the Association of Muslim Social Scientists (AMSS UK), he was the first Chair of the Forum Against Islamophobia and Racism (FAIR), and is the Founder and former Executive Director of the Book Foundation, a registered UK charity which works with partner institutions in the UK and the USA to improve understanding of Islam in the West. Currently an Associate Editor of *Critical Muslim*, he has also written regular columns over the years for *Islamica* and *Emel* magazines, and the Credo column in *The Times*. A former lecturer in Applied Linguistics at the University of Edinburgh, he endeavours to apply his academic specialisms of philology and psycholinguistics to contemporary issues affecting public perception of Islam and Muslims, and to the advancement of critically aware dialogue and polylogue in a range of socio-cultural and educational contexts.